VERMONT FISH AND WILDLIFE DEPARTMENT
ADMINISTRATIVE STANDARDS REGARDING
REHABILITATION OF NATIVE WILDLIFE

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VERMONT FISH AND WILDLIFE DEPARTMENT ADMINISTRATIVE POLICY REGARDING REHABILITATION OF NATIVE WILDLIFE

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I. PROGRAM MISSION STATEMENT

The Vermont Department of Fish and Wildlife (VDFW) supports providing information and assistance to the public regarding orphaned or debilitated wildlife following the procedures outlined in this policy. This policy summarizes the criteria and standards for issuing permits to independent wildlife rehabilitators that are authorized for the temporary possession of sick, injured, orphaned, or debilitated wildlife. It will be the goal of this program to return successfully rehabilitated wildlife to their natural habitat, as quickly as possible, providing them with a reasonable chance to function and behave normally within their population and ecosystem. However, the welfare of wildlife populations shall take precedence over the welfare of any individual animal. No action taken in the interest of an individual animal should jeopardize the health and sustainability of any of Vermont's wildlife populations.

Because of the fact that:

- the VDFW under 10 V.S.A. §5215(b) is authorized to license the rehabilitation of native wildlife and develop policies for the implementation of this program;
- the VDFW recognizes the public service aspect of this activity for native species; and
- the VFWD recognizes the importance of removing sick, injured, or orphaned wildlife from the general public and into the hands of experienced, professional rehabilitators;

the VFWD supports the rehabilitation of some native wildlife species as outlined in the guidance below but will exercise the authority to protect wild populations when threatened by disease or other factors.

II. SUMMARY OF PERTINENT STATUTES AND REGULATIONS FOR THE POSSESSION, CARE, AND RELEASE OF NATIVE WILDLIFE

Title 10 V.S.A. § 4081. Policy: Establishes that wildlife are public trust resources and shall not be reduced to private ownership. The F&W Commissioner and the F&W Board are responsible for the protection, propagation control, management and conservation of fish, wildlife and furbearing animals in Vermont.

Title 10 V.S.A. § 4709. Transport, importation, possession, and stocking wild animals; possession of wild boar or feral swine. Establishes that no person shall bring into, transport or possess any live wild animal without authorization from the Commissioner or his or her designee.

Title 10 V.S.A. § 5215. Game refuges; how created; regulations. Establishes that the Fish and Wildlife Commissioner may issue permits to rehabilitate wildlife.

Title 10, Chapter 123. § 5401-5410. Protection of Endangered Species. Establishes the process for listing threatened or endangered species, provides for lists to be established of all species considered T&E, and requires a permit for the take, possession and transport of T&E species.

Title 10 Appendix: Vermont Fish and Wildlife Regulations:

> **Chapter 1: Game, Subchapter 1: General Provisions, App. § 9. Wildlife rehabilitation** is the rule outlining the qualifications and process for acquiring a rehabilitation permit and general duties and limitations for rehabilitators.
>
> **Chapter 1: Game, Subchapter 1: General Provisions, App. § 10. Vermont Endangered and Threatened Species Rule** provides a list of all endangered and threatened species in Vermont.

Title 20 V.S.A. § 3801 Rabies Control Authority states the Department of Fish and Wildlife is responsible for the management of rabies in wildlife and educating the public about rabies in wildlife.

III. ADMINISTRATIVE AND OPERATIONAL UNIT RESPONSIBILITIES

Wildlife Rehabilitation Governance Board (WRGB): Shall review all application for wildlife rehabilitators. Members of the WRGB will be appointed by the Commissioner of Fish and Wildlife. The WRGB will consist of a Member of the Warden Service, a Department of Fish and Wildlife biologist, and two permitted wildlife rehabilitators.

Warden Service (WS): Will provide the primary oversight of the rehabilitation program with assistance from Wildlife Division staff. District game wardens assist the public with reports of distressed wildlife, which includes referring the public to permitted rehabilitators when appropriate. District game wardens will also conduct facility inspections with/or without species biologists, on a routine basis or in response to reports of violations, to ensure compliance.

Wildlife Division: Wildlife biologists will review pertinent activity reports once every month and assist the public with reports of distressed wildlife, including referral to permitted rehabilitators.

Wildlife biologists will determine categories of species that may be accepted for rehabilitation.

Designated wildlife staff may accompany law enforcement staff to rehabilitation facility inspections, and provide technical assistance to LE, the public, and permittees.

Law Enforcement Administrative Assistant: Is the primary contact for applicants to become permitted wildlife rehabilitators.

Wildlife Division Director: The director, or his/her designee, will coordinate with LE to ensure that protocols and processes are biologically appropriate and that permittees are operating according to professional rehabilitation standards and state policy.

Wildlife Rehabilitation Permittee: hereafter referred as Permittee: These are individuals that receive a permit to provide care and rehabilitation services to specified native wildlife species.

Appendix A contains contact information for warden services, biological and administrative staff.

IV. DEFINITIONS

A. **Exhibition:** Any purposeful display in any format, (i.e. written, visual, or audio) showing, or exhibiting of a wild animal for any purpose.

B. **Incompatible Species**: These are species that when placed in the same enclosure or in adjacent enclosures are unable to exist together without causing an imminent threat to the health or safety of one or both species.

C. **Native Species**: Wildlife species that are naturally occurring, either presently or historically, or expanded their range to include Vermont.

D. **Naturalized Species**: Wildlife Species which are not naturally occurring in Vermont, but rather are either purposely introduced or unintendedly escaped exotic species that have become established in Vermont.

E. **Rabies Vector Species (RVS**): Raccoon, skunks, foxes, and bats. While all mammals are susceptible to rabies virus, these species have a higher likelihood of infection, act as reservoirs for the disease, and require a rabies vector rehabilitation permit prior to handling.

F. **Rehabilitation**: The process of providing aid to sick, injured, displaced, or distressed wild animals so that they may survive and be released into their native habitats.

G. **Social media**: Includes all means of communicating or posting information or content of any sort on the internet, including to your own or someone else's web log or blog, journal or diary, personal web site, social networking or affinity web site, web bulletin board or a chat room.

H. **Zoonotic Disease**: Any disease that is transmissible from animals to humans or from humans to animals. Common zoonotic diseases include: Staphylococcus, Salmonella, tularemia, rabies, raccoon roundworm, Covid 19, and Lyme disease.

V. ELIGIBILITY REQUIREMENTS FOR A WILDLIFE REHABILITATION PERMIT

A. Must be 18 years of age or older.

B. Must disclose any criminal convictions and submit to a background check. Convictions of crimes against a person or animal, violations of fish and wildlife statutes and regulations, failure to pay Court ordered fines and penalties, and failure to pay child support may disqualify the applicant from certification. See Section VII A.

C. Must satisfactorily complete and provide documentation of a minimum of 100 hours of training, experience in the care, feeding, handling, and rehabilitation of native wildlife species. A Bachelor of Science or higher degree in a relevant biological science, obtained at an accredited institution of higher learning may be substituted for 50 hours of experience.

D. Must satisfactorily complete the application to become permitted for Wildlife Rehabilitation.

E. Must have adequate facilities (see **Appendix H:** NWRA Minimum Standards for Wildlife Rehabilitation) and satisfactorily demonstrate the capability to house and rehabilitate native wildlife species that the applicant intends to rehabilitate.

F. Permits are automatically renewed annually, provided annual reports are submitted in a timely manner and operating standards are met (see Conditions for Permit Renewal below).

VI. APPLICATION PROCEDURE

Step 1. An applicant inquiry is followed-up by sending an application packet, which includes the following: "Wildlife Rehabilitation is it for you?" publication, a list of the 4 publications on the practice of wildlife rehabilitation that you have read, the names and addresses of two references, any rehabilitation organizations that you are currently a member of, Application for Wildlife Rehabilitation form, Statement of Veterinary Support, Facilities Information Form, and Certificate of training form indicating the number of hours worked and signed by the rehab sponsor. Once the application is returned, and the applicant is determined to be eligible, warden service will conduct a background check. (See **Appendix C**, for forms). Applicants are encouraged to reach out to their regional wildlife biologist and district game warden to establish a relationship and let them know their intention to rehabilitate wildlife.

Step 2. The applicant will be interviewed by a state game warden and other experts to assess the applicant's proficiency in wildlife rehabilitation.

Once Step 2 have been satisfied, the applicant will be issued a notice of pre-approval, pending the construction and inspection of facilities by the Department.

Step 3. Once the application has been approved, the interview has been completed, and the pre-approved applicant has completed the physical construction of their facility, a facilities inspection can be scheduled with a state game warden and designated wildlife biologist/specialist. See **Appendix C** for Facility Inspection Form. If there are any deficiencies or required changes to the facility, the applicant will be notified by the Department and given the opportunity to address any issue and have the facility re- inspected.

Permit Review. If there are deficiencies indicated during the facilities inspection, the applicant will be notified about corrective actions that need to be taken before a permit can be issued. When the applicant feels they have appropriately addressed the corrective actions, they can schedule a follow-up facilities inspection and application review.

Once all of the steps in the application process have been satisfied, the Department will review all submitted materials and make a determination of which species and under what conditions an applicant is authorized to provide rehabilitative care, and issue a permit based on these conditions. This may include issuing a permit on provisional status or restricting the species that can be rehabilitated, until such a time when the applicant has satisfied all the deficiencies in facilities, training, or required experience.

VII. CONDITIONS FOR PERMIT RENEWAL

A. Maintain a clear criminal record; any of the following crimes against a person or animal may disqualify a permittee from being reauthorized:

   1. No conviction of a violation of Vermont Fish and Wildlife laws within the previous three years, nor have been convicted of any misdemeanor or felony conviction within the previous three years;

   2. A violation of Title 4, VSA 1110, failure to be in "good standing" with respect to payment of fines and penalties within the Vermont Judicial System;

   3. Delinquency in Child Support Payments consistent with violations of the Uniform Interstate Family Support Act such that license nonrenewal is authorized for failure to comply with child support payments resulting in Family Court orders of license suspension.

B. Abide by Department rules, this policy and all applicable State and Federal Laws.

C. Must maintain a professional and courteous working relationship with the public and Department staff.

D. Must submit Activity Reports, every other month even if no animals had been handled during that time. Reporting must be received **no later** the 15th of the month.

- ❖ Note: If there are circumstances that arise preventing a rehabilitator from being able to submit in a timely manner, extensions can be given on a case-by-case basis provided the Department is notified in advance (at least 48 hours).

E. Wildlife Rehabilitation permits can be renewed without re-applying, provided that the permittee indicates they wish to continue by providing their signature, current email/physical address, phone number and the advising veterinarian on the **first** Monthly Activity Report form of the new year (see **Appendix C**, Monthly Report of Wildlife Rehabilitator Permittee).

F. Permittees are strongly encouraged to participate in continuing education such as: conferences, formal trainings, workshops, and/or by reading professional journals/newsletters/ articles.

VIII. REHABILITATOR CATEGORIES

Within each of the following categories a rehabilitator may be permitted for certain species or taxa based on their specific areas of training. Other than category I, a rehabilitator may be permitted in more than one category.

- *Category I*: Assistant/Apprentice - Entry level skills/apprentice, less than 2 years' experience, sponsored by a category II, III, or IV for hands-on training/work experience, may provide basic care under the guidance of a category II -IV rehabber to orphaned squirrels, mice, chipmunks, House sparrows, European starlings, and Rock pigeons, woodchucks. Please see section XVI for recommended training.
- *Category II:* More than 2 years of category I experience and/or equivalent experience in another state, completion of at least 6 hours of NWRA sponsored and approved continuing education/training prior to submission of application, may provide care for all wildlife ***except*** rabies vector, bobcat, otter, fisher, coyote, big-game animals, reptiles, amphibians.
- Category III: Rabies Vector Rehabber - permitted to rehabilitate RVS species (raccoon, red/gray fox, skunk, bats) and all species listed as allowable in category I and II
- Category IV: Meets all category II requirements and is permitted to rehabilitate fisher, bobcat, otter, coyote, avian/raptors (with appropriate permits and facilities), and T&E species (with appropriate state and federal permits) based on specific training/protocol requirements for these species.
- Category V: Meets all category II requirements and is allowed to rehabilitate muskrat, mink, beaver, reptiles/amphibians, and waterfowl and wading birds (with appropriate permits) with appropriate facilities (i.e., on-site pond).
- Category VI: Rehabilitation facility, accredited education facility, and/or/ hospital (i.e., VINS/ECHO/Southern Vermont Museum) are specifically permitted based on species of focus.

- Rehabilitation of big game animals is currently prohibited in Vermont.

IX. REPORTING

Wildlife rehabilitators are responsible for maintaining complete and accurate records for each individual animal/litter that is handled, as outlined in this manual and Section 5 in Title 10, Appendix 9. These intake forms must be kept for a minimum of five (5) years after the date of death, loss, transfer, or release of the animal and must be made available for inspection during any facility inspection or upon request by the Department or animal welfare agents. The following are required records:

A. **Individual Records**: Intake Form

Information must be kept for individual animals and/or litters. The following information must be collected; however, a permittee is encouraged to record additional information (litters can be tracked on one form):

1. Species
2. Sex
3. Age (neonate, juvenile, adult)
4. Date of acquisition
5. Location of origin of the animal
6. Name, address, and permit number for the receiving facility, if an animal is transferred to another facility.
7. Date of outcome (admitted, released, death, transferred to another facility (must be accompanied by name and contact of facility) or euthanized.
8. Individual tracking numbers may be assigned by permit holders.

See **Appendix C** for an example of VDFW intake form.

B. **Monthly Report:**

Each permittee shall submit a summary monthly report no later than 15th of each month, even if the permittee did not take in any animals for rehabilitation. Volunteer/intern/sub-permittee activities must be submitted under the permittee's report unless otherwise noted in Section XIV (authorized activities).

Failure to submit a report in a timely manner may result in any of the following actions:

1. Verbal warning, with documentation of the warning via an incident report form in the permittee's file.

2. Written warning with verbal follow-up

3. Issuance of a ticket by a warden with the potential of suspension or revocation of permit.

If circumstances arise that prevent a rehabilitator from being able to submit the monthly report in a timely manner, extensions can be given on a case-by-case basis provided the Department is notified at least 48 hours in advance. Requests must be emailed to the law enforcement divisions contact person for rehabilitation.

See **Appendix C** for a copy of the Monthly Report and Request for Extension forms.

X. MINIMUM STANDARDS

All rehabilitation activities must meet minimum standards as currently published by the International Wildlife Rehabilitation Council, and/or National Wildlife Rehabilitation Association. See **Appendix H** for the current version of the standards.

This requirement will be applied to all permittee's rehabilitation activities and for newly constructed facilities. If a permittee constructed their facilities under a previous version of the standards, they will not be required to update their facilities every time the standards are updated. However, when a permittee adds additional capacity or requests permission to rehabilitate additional species, their additional facility infrastructure must meet current standards, and be inspected by the Department before final approval.

As a guiding principle for wildlife rehabilitation in Vermont, the welfare of wildlife populations shall take precedence over the welfare of an individual animal. No action taken in the interest of an individual animal shall jeopardize the health and sustainability of any of Vermont's wildlife populations.

In addition to NWRA standards for care outlined in **Appendix H**, a permittee shall also comply with the Department's minimum standards and the policies set forth in this document. Note that violations of a permit, the NWRA standards, and the standards and policies set forth in this document may be grounds for suspension or revocation of a rehabilitation permit. There is a formal process to submit complaints to the Department in Section XVIII. The following standards shall also apply to all permittees.

Ethics and Social Media

- Permittees shall abide by the Wildlife Rehabilitator Code of Ethics outlined in the NWRA minimum standards, see **Appendix H** for a link.
- Photographs posted on Social Media shall not portray any wildlife patient as a pet (i.e., no cuddling or playing with humans, dressed in costumes, etc.), in a household setting (i.e., bottle feeding on the sofa, playing with pets, etc..) and should show the utmost respect for the animal.
- Permittees shall operate as professionals and therefore avoid posting complaints, criticisms, statements, photographs, video or audio that reasonably could be viewed as

malicious, obscene, threatening or intimidating, that disparage, defame, or that might constitute harassment or bullying fellow rehabilitators, employees, volunteers, customers, veterinarians, Department staff, or other working relationships on Social Media.

Facility Physical Location and Features:

- Some locations that are in close proximity to other dwellings and/or immediately adjacent to daycare facilities, schools, farms, commercial areas, backyard livestock, veterinary clinics, pet salons, etc. may be inappropriate or unsafe for housing wildlife for rehabilitation, . Facilities with these features will receive extra scrutiny by the Department prior to permitting and may require extra measures be put in place (i.e.: secondary visual and physical barriers, signage indicating activities, decontamination protocols etc.

Security and Shelter:

- Wildlife held in captivity must be confined, contained, controlled, and sheltered in such a way as to protect the individual animal, limit unnecessary human contact, and to protect property of others and the health and safety of the public.
- Wildlife will not be housed or allowed to co-mingle with pets, livestock, other domestic animals, or humans.
- All facilities will be maintained in good repair, and cages must be designed to minimize human contact with animals. As such, cages must have visual barriers to minimize the animal from viewing humans and/or other species to reduce imprinting, socialization, habituation, or stress.
- When housing mammals in outdoor enclosures, special consideration must be made to prevent escape by jumping, climbing, flying, or digging. Therefore, in addition to species specific recommendations NWRA minimum standards, the bottom of the enclosure should be made continuous (such as, securing side panels to a wood or concrete base, or wire fencing buried under a natural floor).
- Appropriate doors or other protective devices/measures shall be required for all outdoor pre-release or exercise enclosures and for any enclosure intended for RVS and/or mesocarnivores (bobcat, fisher, etc.) to reduce the chance for wildlife escaping or accidental exposure to bites or scratches (refer to RVS guideline document). All facilities permitted before January 1, 2022 will be grandfathered for this provision, but compliance should be achieved within the next 2 years.

Health and Comfort:

- All wildlife held in outdoor enclosures must be provided with adequate shelter from inclement weather and direct sunlight. Each cage or enclosure must have shelter sufficient to simultaneously protect all wildlife contained therein.

- All wildlife must be provided with living quarters that meet the biological needs of the animal, including suitable space, shelter, temperature, lighting and humidity regardless of whether the housing is indoors or outdoors.
- All wildlife must be provided with appropriate veterinary care including, but not limited to care for injuries and for the control of contagious, parasitic, and nutritional diseases.
- No wildlife may be chained or otherwise tethered to a stake, post, tree, building or any other anchorage at any time unless specifically authorized by the permit.
- Perching birds must be provided perches that are properly sized and textured for the species to allow for prolonged perching and comfortable loafing in order to avoid Bumble foot infections.
- If several animals are housed together, they shall each have sufficient space for exercise and be able to maintain normal social distances from one another according to their species' needs. Incompatible species shall not be housed together.

Sanitation:

- All cages and enclosures must be kept in a sanitary condition.
- Regular cleaning schedules must be maintained, so that excreta shall be removed frequently enough to prevent animals in care from becoming soiled and to minimize disease risk, flies, and odors. Cages may not be stacked in such a way that excrement may enter lower enclosures.
- Enclosures shall be sanitized after being occupied by any wildlife (See NWRA standards, link in **Appendix H**).
- All precautions shall be taken to minimize transfer of disease among animals or between rehabilitators and animals by following the latest safety guidance specific to potential diseases such as White-nose Syndrome, Covid-19, or Snake Fungal disease, etc. (Appendix D subject to change)

Food and Water:

All wildlife under a permittee's care must be provided necessary sustenance. This includes:

- An adequate supply of potable water that is made available in cages and enclosures for drinking, washing or other purposes necessary to the species being contained.
- Regular feeding schedules; the rations supplied must be adequate, nutritious, and so far, as possible consistent with the food which is ordinarily eaten by such animals in the wild. Food must be sufficient to maintain good body condition, and age-appropriate size and weight with a healthy appearance.
- Areas used for the preparation and storage of food must be sufficiently clean to prevent contamination by pathogens or harmful substances. Meat, fish and fresh fruits and vegetables to be fed to animals must be properly refrigerated or frozen to prevent spoilage.

- Food for animals must be stored in such a way as to prevent damage from weather, rodents, insects and animals.
- Animals being cared for shall be supplemented with vitamins and/or minerals as necessary for their health and growth at the advice of a licensed veterinarian.

Diseases:

- A permittee shall notify the Department (Start with the biologist specialist for the species) within 24 hours of diagnosis of any disease that is suspected to be neurologic, highly infectious, or to have population implications. See **Appendix D** for a current list of these reportable diseases.
- Wildlife that is believed to be infected with a zoonotic or highly contagious disease known to infect other wildlife must be treated, quarantined, or euthanized appropriately based upon advice from a licensed veterinarian or the Department. The Department reserves the right to make the final decisions related to treatment, quarantine or euthanasia.
- Animals that have been diagnosed or suspected of having the following diseases shall not be released back into the wild and must be euthanized and reported to the Department: rabies, tularemia, distemper, tuberculosis, parvovirus, chronic wasting disease, epizootic hemorrhagic disease, Covid 19, and plague.
- On properties where domestic poultry or rabbits are present, wild birds or respectively rabbits may only be rehabilitated in accordance with a Biosecurity Plan approved by FWD and Vermont Agency of Agriculture, Food, and Markets.
- Any suspected or confirmed rabies cases must also be reported to the Health Department epidemiologist.
    - Rehabilitators must use proper personal safety equipment and follow sanitation recommendations as outlined by the CDC, WS APHIS, and/or the Vermont Department of Health to minimize the transfer of disease. Rehabilitated animals potentially exposed to a disease that could potentially threatened wild populations may have to be euthanized (Covid-19).

Medication:

- All prescription medication and scheduled drugs must be administered to wildlife patients through formal advice and direction from a veterinarian licensed in Vermont.

Euthanasia:

- Wildlife that are unable to recover from injury or illness, have a terminal illness, or are unable to hunt or forage successfully, shall be euthanized according to guidelines

outlined by the American Veterinary Medical Association (see **Appendix E**), unless the Department grants an exception for a specific animal.

- If a gunshot is the chosen euthanasia method, the Department recommends that permittees use caution and follow all applicable local ordinances.
- Rehabilitators should create their own euthanasia plan/protocol.

Disposal:

- Dead wildlife will be disposed of in a manner that is safe and respectful of the animal and public perception. Acceptable methods include deposit with a properly permitted educational or research institution, burial (with landowner permission) to a sufficient depth (24"to 36" of soil above carcass) to prevent excavation by scavengers, incineration, or a deposit at a licensed rendering facility. If requested by the Department of Fish and Wildlife, the animal will be turned over to them.
- Dead wildlife can be disposed via composting, provided the composting follows the Department of Environmental Conservation rules and Best Management Practices. However, if an animal dies or is euthanized as a result of a suspected neurological or highly infectious disease, the permittee must contact the VDFW for approval prior to composting that animal.
- Wildlife that has been euthanized or died in a permittee's care, which have not been medically treated or believed to have a zoonotic or highly infectious disease may be used to feed other animals in the permittee's care, at the discretion of the permittee.

Human Habituation:

- If a wildlife species is a candidate for release back into the wild, a permittee shall make every reasonable effort to avoid taming, imprinting, or creating dependency on humans.
- If a facility consistently has wildlife that become habituated to humans due to their practice(s), their permit may be suspended or revoked.

XI. RELEASE PROTOCOLS

All rehabilitated wildlife must be released from care and rehabilitation within 6 months of receipt of animal. In the vast majority of patient cases, this 6-month time period will be adequate to provide appropriate rehabilitative care. However, in the rare circumstance that requires an animal to be kept for longer than the 6-month time limit, a permittee may request an extension by filling out a Request for Time Extension for Possession of an Animal in Care (see **Appendix C**). The request will be reviewed by the Department and the permittee will be notified of approval or denial. If the Department denies the request, the animal must be immediately released or euthanized.

Release of wildlife will be appropriately timed for a given species, with specific consideration given to season, time-of-day, environmental conditions, animal's age, and habitat requirements.

For most species, all reasonable and practical efforts shall be made to released in appropriate habitat. In addition, some species (i.e. herps, bats, T&E species, etc.) should be released as close as possible to the location where they were found.

For migratory species, the permittee shall contact the Department [LE Administrative Assistant] for additional guidance regarding release, when the care for that animal is anticipated to conclude immediately prior to or during the migration window.

Similarly, when dealing with a species that requires special overwintering conditions, the permittee shall consult the wildlife specialist for that species to determine appropriate timing and release location for that animal.

For any threatened or endangered species, the permittee shall consult the wildlife specialist for that species to determine release conditions for that animal. (see **Appendix A** for contact information for Department biologists).

Consent must be obtained prior to release of rehabilitated wildlife. This includes, private property, town property, or state-owned lands. Likewise, wildlife shall not be released to unapproved areas, or in a manner which may harm other animals, property, or the rehabilitated animal.

Relocation activities should avoid utilizing the same site for numerous releases of the same species. These situations could lead to added stress for release animals, create conditions for disease transmission, and/or may increase mortality.

Release of RVS species shall follow the RVS protocol.

Non-native, non-naturalized wildlife shall not be released into the wild at any time.

XII. EMERGENCY PLAN

Each permittee must have a written emergency plan associated with the facility and the plan must be posted and available upon inspection. This plan shall highlight who will be responsible for animals in the case of an unexpected absence, illness or death of owner; and what actions are in place for severe damage to enclosures. A copy of the plan should be submitted to the Department.

In the event of an unlikely emergency or loss of diseased individuals, permittees must notify the Department within 24 hours of the event.

The Department strongly encourages permittees to include protocols and staff training for human medical emergencies in their plan, including prominent posting of local emergency contact information.

See **Appendix J** for example Emergency plan.

XIII. THREATENED OR ENDANGERED SPECIES

The care and rehabilitation of threatened or endangered species will be evaluated on a case-by-case basis. The possession and treatment of any threatened or endangered species requires an additional permit from the Department in accordance with state statutes, 10 V.S.A. Chapter 123. Any permittee that comes into possession of a state listed T&E species must report that possession to the Department within 48 hours. For the purposes of this policy the permittee shall contact either the Wildlife Division director, or during weekends or holidays, Warden Service through the regional communications centers.

Similarly, when a permittee comes into possession of a federally listed T&E species, they must also contact the Endangered Species Permit office for the US. Fish and Wildlife Service Regional office in Hadley, MA within 48 hours of possession.

See **Appendix A** for contact information, and **Appendix B** for a list of T&E species.

XIV. AUTHORIZED ACTIVITIES

Permittees are only authorized to provide care and rehabilitation services for a period of up to 6 months for the species listed on their permit, unless otherwise authorized by the Department (see **Appendix C** for appropriate form).

- Note: It is recognized that occasionally a permittee might temporarily gain custody of an animal which they are not authorized to possess while locating another facility that is able to possess and care for that animal. However, the transfer of this animal should be done as quickly as possible in order to provide the most appropriate and best care possible for the animal. It is the responsibility of the permittee that took possession of the animal to arrange the transport to another facility, or they should indicate that they are unable to take the wildlife patient into custody and direct the customer to an appropriately permitted facility. For purposes of this activity, customer also includes Department staff who unknowingly bring an animal to permittee which they are not authorized to provide care.

Special Considerations for RVS:

Rehabilitation of high-risk RVS is entirely a voluntary decision made by the individual permittee and requires a special permit.

It is highly recommended that anyone handling RVS species receive a pre-exposure rabies vaccination and have acceptable titers that are checked every 2 years.

All Staff/volunteers who provide direct care and/or interact directly with RVS shall use protective measures (i.e.: gloves, long-sleeved shirts, proper restraint devices, etc.).

If any domestic animal or human (including the rescuer, transporter or handler) is bitten, scratched, or has been exposed to saliva, brain or spinal cord fluid from an animal suspected of any neurologic disease (particularly rabies), then the animal must be euthanized, the Rabies Hotline called (1-800-4-RABIES), and the carcass submitted to the Public Health Laboratory of

the Vermont Department of Health. See **Appendix F** for Vermont Rabies Management Guidelines.

XV. PROHIBITED ACTIVITIES include these in permit

A wildlife rehabilitation permit **does not** provide ownership of any wildlife. Any animal being cared for shall remain the property of the State of Vermont under primary jurisdiction of VDFW. As such, wildlife may not be sold, bartered or traded, used for propagation purposes, or used to conduct commercial transactions of any nature.

However, non-releasable wildlife (as determined by the Department) may be transferred to another permitted facility with prior permission from the Department.

The Department maintains full authority to make all final decisions about disposition of any animal taken in for rehabilitative care.

Non-releasable wildlife cannot be legally retained under a wildlife rehabilitation permit, animals must be either euthanized or transferred to an individual/facility which is permitted to possess or exhibit native wildlife.

A permittee is **not** authorized to breed animals in captivity or purposefully collect eggs from any native bird, reptile, or amphibian species for fostering, unless otherwise authorized or directed by the Department. However, it is understood that sometimes a permittee will occasionally possess eggs as part of the normal rehabilitation process, at which point fostering is acceptable.

Unless authorized by the Department, captive breeding or breeding of surrogates for the purposes of release into the wild is prohibited. This includes non-native naturalized species that are not otherwise protected (European starlings, English house sparrows, pigeons (rock doves), brown (Norway) rats, house mice).

Wildlife rehabilitation shall be done only on a not-for-profit basis, but any facility is encouraged to accept donations from individuals or organizations presenting wildlife for care. However, accepting wildlife for rehabilitation shall not be conditional upon the receipt of donation or fee, as outlined in **Title 10 V.S.A. App. 9 Wildlife Rehabilitation, Title 10 VSA 5215**.

XVI. STANDARD SKILLS DESIRED FROM THE 100-HOUR TRAINING REQUIREMENT

A. Public Relations/Public Health:

An apprentice/intern is expected to have experience **and/or** training specific to public relations. This shall include both spending time on the phone interacting with the public dealing with a

variety of situations/species. During the course of their training, they shall be familiar with resource materials regarding public education and assistance related to wildlife rehabilitation. A portion of this training shall also include admissions of animal patients from start to finish. The apprentice must understand the principles of good public communication and feel comfortable communicating with the public. They must be able to provide well-informed advice.

> **List of necessary skills to acquire**: professional public interaction on phone and in-person, knowledge of resources to provide well-informed advice for outreach and public education that is based on ecology and natural history, experience dealing with highly charged emotions and inappropriate human possession, record keeping, knowledge of public safety issues dealing with distressed wildlife, experience relating knowledge of wildlife-related laws and appropriate agencies contacts (municipal, state, or federal).

B. **Public Health/Zoonotic disease/Disinfectants:**

An apprentice/intern is expected to have training/experience in zoonotic disease, disinfectants, and public health. The apprentice/intern shall have a solid understanding of the role they play to prevent the contraction and spread of disease from handling distressed wildlife and shall be aware of the resource material available to them.

This shall include proper facility sanitation and use of personal protective equipment, understanding of when and who to contact when disease is documented (**Appendix D**), some experience dealing with common disease situations, particularly where the public is concerned.

> **List of necessary skills to acquire**: Understanding common zoonotic diseases in Vermont and how they relate to wildlife rehabilitators, patients, domestic animals, and the public; understanding the use and importance of various disinfectant, proper personal protective equipment (PPE) use and sanitation, being able to identify and correct possible safety hazards to patients, oneself, volunteers, and members of the public in relation to disease, and have a basic understanding of the role wildlife rehabilitators play legally and morally when dealing with the public and possible disease concerns. (Appendices F, J, K, and L)

G. Species Identification/Handling Techniques:

An apprentice/intern is encouraged to have **training** on species identification and handling techniques. The apprentice shall understand the thought process behind assessing how to approach and properly restrain a variety of wildlife species. Likewise, they shall gain hands-on experience and training on safely restraining and capturing animals. They shall thoroughly understand the dangers and risks relating to working with wild animals and will feel confident in their ability to work independently. The apprentice shall display and have the ability to match food, habitat set-up, facility modifications needed to reduce stress or accommodate species-specific needs, and husbandry supplies for a variety of species they plan to provide care for.

> **List of necessary skills to acquire**: A basic understanding of species identification and resources available to aid in identification, an understanding of the importance of proper identification in relation to rehabilitation process (natural history, diet, cage

setup, specialization, PPE, zoonotics), hands-on experience handling a variety of species, of all age classes with a variety of distress levels, and experience with a variety of proper handling techniques.

D**.** **Basic Anatomy/Triage:**

An apprentice/intern is encouraged to have **training** on basic anatomy and triage. The apprentice will learn how to identify common anatomical structures for each species category and perform a basic physical exam. With training and hands-on experience, the apprentice will be able to identify common illnesses and injuries, how to prioritize treatment when presented with multiple cases, and how to initially stabilize a patient. They shall become familiar with best practices and facility and other requirements for any species that has specialized anatomy or needs.

List of necessary skills to acquire: An understanding of basic anatomy and physiology of mammals, birds, and reptiles, hands-on experience triaging cases based on the severity of injury or illness with which an animal presents, experience performing a thorough physical exam and identify clinical signs and symptoms of common injuries and diseases, hands-on experience stabilizing patients upon admission prior to a thorough physical exam or veterinary care can be performed. These skills shall be inclusive of all age classes, neonate to adult.

E. **Fluids/Feeding/Nutrition:**

An apprentice/intern is encouraged to have **training** on nutrition, feeding and fluid therapy. With training and hands-on learning, the apprentice will be able to select species-appropriate diets. They shall have experience identifying the need for fluid therapy, assessing dehydration, calculating appropriate fluid quantities and selecting an appropriate method of fluid administration. They shall also learn how to identify degrees of emaciation and how to perform emaciation protocols. The apprentice shall know how to choose and perform appropriate feeding methods for neonate animals—gavage and syringe feeding.

List of necessary skills to acquire: a basic understanding of diet selection based on trophic category, age, and physical condition, hands-on experience identifying dehydration and ability to administer fluid therapy, hands-on experience identifying emaciation and execution of appropriate methods of treatment, hands- on experience in selection and administration of appropriate feeding techniques for neonates for a variety of species (gavage vs. syringe feeding).

H. **Euthanasia/Setting Limits/Release:**

An apprentice/intern is encouraged to have **training** related to evaluation of patients for release back into the wild, euthanasia methods and evaluation, setting limits to work and patient loads. This experience can be obtained through training and experience gained working alongside staff in the wildlife rehabilitation center.

They will learn how to evaluate patients for release based on species and condition considerations, and how to select appropriate release locations. The apprentice will understand how to identify cases in which euthanasia is the appropriate decision for a patient. They will also understand the reasoning behind setting intake limits based on skill set and caseload limitations, and adherence to a Wildlife Rehabilitator's Code of Ethics. The apprentice will learn to recognize signs of burnout and compassion fatigue, and their role in combating this both for themselves and fellow staff and volunteers.

> **List of necessary skills to acquire**: a basic understanding of evaluating patients for release and how to select suitable release habitat based on species-specific criteria, understanding the role of euthanasia in wildlife rehabilitation, and hands- on experience and ability to make appropriate end-of-life decisions for patients, an understanding of the importance of setting limits based on skill level and caseload, and ability to recognize the signs of burnout and compassion fatigue in oneself and colleagues and have developed tools to address these conditions.

I. Fundraising/Administrative:

An apprentice/intern is encouraged to have **training/overview** on funding and administration. They shall be introduced to various methods of obtaining funding, such as becoming a 501c3 non-profit and grant writing, as well as how to solicit different kinds of donations. They shall also gain leadership experience through supervising volunteers and interns and be introduced to the process of recruiting and managing these groups. The apprentice shall learn what data is needed for and how to submit annual state reports. The apprentice shall understand the difference between operating as an in-home wildlife rehabilitator and being an employee at a wildlife rehabilitation center, and how to manage their own wildlife rehabilitation activities. This area of training is meant as a general overview to the operational management aspects of rehabilitation.

> **List of necessary skills to acquire**: a basic understanding and introduction to avenues through which to acquire funding for wildlife rehabilitation activities, hands-on experience collecting and preparing annual reports, hands-on experience working with and managing volunteers, and hands-on experience managing different facets of wildlife rehabilitation activities that could be applied to both in-home wildlife rehabilitation or a center.

XVII. COMPLAINTS, PENALTIES, AND APPEALS.

- Complaints pertaining to wildlife in captivity will be investigated and findings associated with that investigation may be considered at any time. If warranted, a permit may be suspended, revoked or terminated for failure to comply with **Title 10 V.S.A. 5215, Appendix 9;** the permit, or any of the Minimum Standards for Rehabilitation of Wildlife. The Department will follow the process for the suspension or revocation of a permit set forth in **Title 3 V.S.A. Chapter 25.**

- Formal documentation of a complaint or reported activities that are inconsistent with rules, regulations and this policy will be documented in the **Incident Report form** found in **Appendix C**.

- **Title 10 V.S.A. Appendix 9**, Vermont **Title 10 V.S.A. 4709** and other state laws set limits for Importation, Possession, Propagation, Rehabilitation, and Exhibition of Wildlife outlines potential penalties for violations to this policy or rules and regulations regarding wildlife in captivity.

- **Title 10 V.S.A. Chapter 123 and Title 10 V.S.A. Appendix 10** set forth the state law regarding threatened and endangered species.

Appendix A. Important Contact Information for Wildlife Rehabilitation

Fish & Wildlife Department Montpelier Central Office		
Mark Scott Wildlife Director 802-828-1478 (office) mark.scott@vermont.gov	Col. Jason Batchelder Director of Law Enforcement 802-828-1508 (office) jason.batchelder@vermont.gov	Maj. Justin Stedman Deputy Chief Warden 802-828-5005 (office) justin.stedman@vermont.gov

WILDLIFE DIVISION CONTACTS		
Barre Regional Office	**Essex Regional Office**	**Rutland Regional Office**
John Austin Lands & Habitat Program Manager 802-476-0197 (office) 802-371-9895 (cell) john.austin@vermont.gov Noel Dodge Wildlife Biologist 802-689-0000 (cell) noel.dodge@vermont.gov	Alyssa Bennett Small Mammals Biologist 802-353-4818 (cell) alyssa.bennett@vermont.gov John Gobeille Wildlife Biologist 802-879-5696 (office) 802-324-6096 (cell) john.gobeille@vermont.gov Toni Mikula Fish & Wildlife Specialist 802-622-4525 (cell) toni.mikula@vermont.gov David Sausville Migratory Game Bird Project Leader 802-879-5699 (office) 802-324-4206 (cell) david.sausville@vermont.gov	Joel Flewelling Fish & Wildlife Specialist 802-786-3879 (office) 802-747-8010 (cell) joel.flewelling@vermont.gov Nick Fortin Deer & Moose Project Leader 802-786-3860 (office) 802-793-8777 (cell) nick.fortin@vermont.gov Luke Groff Herpetologist 802-760-0089 (cell) luke.groff@vermont.gov
St. Johnsbury Regional Office	**Springfield Regional Office**	
Tim Appleton Wildlife Biologist 802-793-5262 (cell) tim.appleton@vermont.gov Paul Hamelin Wildlife Habitat Biologist 802-751-0101 (office)	Mary Beth Adler Furbearer Program Technician 802-289-0629 (office) 802-777-5771 (cell) marybeth.adler@vermont.gov Chris Bernier Wild Turkey Project Leader	

802-535-7634 (cell) paul.hamelin@vermont.gov Doug Morin Migratory Birds Biologist 802-793-3837 (cell) doug.morin@vermont.gov Tony Smith Fish & Wildlife Specialist 802-661-8332 (cell) tony.smith@vermont.gov	802-777-0823 (cell) chris.bernier@vermont.gov Jaclyn Comeau Black Bear Project Leader 802-461-5620 (cell) Jaclyn.comeau@vermont.gov Kim Royar Furbearer Project Leader 802-747-8412 (cell) kim.royar@vermont.gov Ryan Smith Fish & Wildlife Specialist 802-245-4112 (cell) ryan.smith@vermont.gov

Warden Listing by District:

https://vtfishandwildlife.com/contact/contact-a-warden

Game Warden Patrol Map:

https://anrweb.vt.gov/PubDocs/FWD/Maps/Warden/WardensAsize.pdf

Appendix B. State and Federal Lists of Endangered, Threatened and Special Concern Species

https://legislature.vermont.gov/statutes/fullchapter/10/123

https://legislature.vermont.gov/statutes/section/10APPENDIX/001/00010

Endangered and Threatened Birds, Mammals, and Herps of Vermont

Vermont Natural Heritage Inventory Vermont Fish & Wildlife Department

28 March 2015

The species in the following list are protected by **Vermont's Endangered Species Law (10 V.S.A. Chap. 123)**. There are 36 state-endangered and 16 state-threatened animals in Vermont. Those with a federal status of Threatened or Endangered are also protected by the **Federal Endangered Species Act (P.L. 93-205)**.

For further information contact the Vermont Natural Heritage Inventory, Vermont Fish & Wildlife Department, 1 National Life Drive, Montpelier, VT 05620-3702. (802) 828-1000.

Common Name	Scientific Name	State Status	Federal Status
Amphibians			
Fowler's Toad	*Anaxyrus fowleri*	E	
Boreal Chorus Frog	*Pseudacris maculata*	E	
Reptiles			
Spotted Turtle	*Clemmys guttata*	E	
Spiny Softshell (Turtle)	*Apalone spinifera*	T	
Common Five-lined Skink	*Plestiodon fasciatus* Synonym: *Eumeces fasciatus*	E	
North American Racer	*Coluber constrictor*	T	
Eastern Ratsnake	*Pantherophis alleghaniensis* Synonym: *Elaphe obsoleta*	T	
Timber Rattlesnake	*Crotalus horridus*	E	
Mammals			
Eastern Small-footed Bat	*Myotis leibii*	T	
Little Brown Bat	*Myotis lucifugus*	E	
Northern Long-eared Bat	*Myotis septentrionalis*	E	LT
Indiana Bat	*Myotis sodalis*	E	LE
Tri-colored Bat	*Perimyotis subflavus* Synonym: *Pipistrellus subflavus*	E	
Canadian Lynx	*Lynx canadensis*	E	LT
Eastern Mountain Lion	*Puma concolor couguar* Synonym: *Felis concolor couguar*	E	LE, PDL
American Marten	*Martes americana*	E	

Common Name	Scientific Name	State Status	Federal Status
Birds			
Spruce Grouse	*Falcipennis canadensis*	E	
Bald Eagle	*Haliaeetus leucocephalus*	E	
Upland Sandpiper	*Bartramia longicauda*	E	
Red Knot	*Calidris canutus*	T*	LT
Black Tern	*Chlidonias niger*	E	
Common Tern	*Sterna hirundo*	E	
Eastern Whip-poor-will	*Antrostomus vociferus* Synonym: *Caprimulgus vociferus*	T	
Common Nighthawk	*Chordeiles minor*	E	
Loggerhead Shrike	*Lanius ludovicianus*	E	
Sedge Wren	*Cistothorus platensis*	E	
Rusty Blackbird	*Euphagus carolinus*	E	
Henslow's Sparrow	*Ammodramus henslowii*	E	
Grasshopper Sparrow	*Ammodramus savannarum*	T	

State Status - Legal protection under Vermont Endangered Species Law (10 V.S.A. Chap. 123)
E = Endangered: in immediate danger of becoming extirpated in the state
T = Threatened: with high possibility of becoming endangered in the near future

Federal Status - Legal protection under the federal Endangered Species Act, U.S. Fish & Wildlife Service
LE = Listed Endangered
LT = Listed Threatened
SC = Species of Concern (does not denote legal protection)
C = Candidate for Listing (does not denote legal protection)

Appendix C. Important Forms for Wildlife Rehabilitation Permits

VERMONT DEPARTMENT OF FISH AND WILDLIFE
One National Life Drive Davis 2 Montpelier VT 05620-3702
Phone 802-828-1000/Fax 802-828-1529

WILDLIFE REHABILITATION INTAKE SHEET

Records must be maintained and available for inspection for a period of two years.

* REQUIRED FIELD

WILD ANIMAL INFORMATION

* SPECIES

* DATE FOUND

* TIME FOUND

ADULTS DEPENDENTS TOTAL

GENDER: Male___Female_____Unknown _____ HAS ANYONE BEEN BITTEN? No L Yes

* COUNTY FOUND

* TOWNSHIP FOUND

* LOCATION FOUND *(latitude, longitude)*

LIST ALL FOOD, MEDICATION, OR TREATMENTS GIVEN TO THE ANIMAL(S):

PRESENTER INFORMATION

NAME PHONE NUMBER

ADDRESS

CITY STATE ZIP

COUNTY TOWNSHIP

EMAIL

¯ THIS ANIMAL(S) MAY BE RELEASED ON MY PROPERTY *(check box)*

PRESENTER SIGNATURE *DATE*

REHAB PERMIT No.

RECORD No.

DATE ADMITTED

*REASON FOR DROP-OFF

(Please check all that apply)

- Found on ground
- In a trap
- Fell from nest
- Nest destroyed
- In the road
- Unable to stand
- Limping
- Oiled
- Caught by cat
- Caught by dog
- Hit window
- Hit by car, lawn mower, or weed eater
- Shot
- Abnormal behavior/appears sick
- Caught in fishing line/hook
- Orphaned (mother known dead)
- Orphaned (suspected)
- Unable to fly
- Other:

SUPPORT

Wildlife rehabilitators are non-profit organizations that rely on donations to help purchase food, medications, and supplies for this animal and others.

Yes, I would like to make a contribution.

$25 $50 $75

$100 Other $_____

VERMONT DEPARTMENT OF FISH AND WILDLIFE
One National Life Drive Davis 2 Montpelier VT 05620-3702
Phone 802-828-1000/Fax 802-828-1529

WILDLIFE REHABILITATION INTAKE SHEET

Records must be maintained and available for inspection for a period of two years.

* REQUIRED FIELD

REHAB PERMIT No. _____ RECORD No. _____ DATE ADMITTED _____

FOR INTERNAL USE ONLY

IF NOT ON SITE, SUB-PERMITTEE NAME _____ DATE RECEIVED _____

PATIENT

PATIENT ID: _____

☐ INITIAL CARE/OBSERVATION

_____

_____

_____

_____

☐ TREATMENT

_____

_____

_____

_____

MEDICATIONS: _____

DISPOSITION

*Date: _____

☐ Dead on arrival

☐ Died

☐ Euthanized

☐ Released * Release Location: _____

☐ Transferred * Transferred to: _____ Approved by Division of Wildlife Date: _____

☐ Education

VERMONT DEPARTMENT OF FISH AND WILDLIFE
One National Life Drive Davis 2 Montpelier VT 05620-3702
Phone 802-828-1000/Fax 802-828-1529

Incident Report Form

*In accordance with the provisions of VFWD **Title 10 V.S.A. § 4709** and **Chapter 1: Game, Subchapter 1: General Provisions, App. § 9** rules for importation, possession, propagation, rehabilitation, and exhibition of wildlife, the following document shall be submitted in order to file a formal complaint or document a violation of policy, rules or law regarding wildlife in captivity.*

Information about the Incident

Date incident occurred:	**Time:**
Location of incident (list facility and permittee name, if known):	

Type of incident being reported:

- ☐ Inappropriate human contact
- ☐ Unsanitary conditions
- ☐ Unsafe treatment of wildlife
- ☐ Failure to report
- ☐ Personal conflict
- ☐ Insufficient facilities
- ☐ Inappropriate possession of wildlife
- ☐ Other (Please indicate):

Detailed description of incident (what happened, how it happened, factors leading to the event, species involved etc…):

Were there any other witnesses or people involved? ☐ Yes ☐ No
(please list name, address and phone numbers if possible):

Submitter Information

Individual submitting report (print name):

Date submitted:

Submitter Contact information:
Phone ( ) _____

Email:_____

Physical Address: _____

_____

_____

Report by Submitter is:

☐ First- hand

☐ Third-party

Complainant's relationship to the Incident:

☐ Customer ☐ Employee ☐ Veterinarian

☐ Volunteer ☐ Intern ☐ Sub-permittee

☐ Department Staff ☐ Vendor ☐ Other (please list)

_____

To Be Completed by Vermont Dept. of Fish and Wildlife

Report received by:

Action taken:

Please submit this form:
Vermont Department of Fish and Wildlife
ATTN: Hope Carey
One National Life Drive Davis 2 Montpelier VT 05620-3702
or via email to: Hope.Carey@vermont.gov

VERMONT DEPARTMENT OF FISH AND WILDLIFE

One National Life Drive Davis 2 Montpelier VT 05620-3702
Phone 802-828-1000/Fax 802-828-1529

Report of Wildlife Rehabilitator Permittee

REPORT SUBMITTED FOR MONTH/YEAR: _____

Name of Permittee:_____ **Phone Number:** (___)_____ **Permit #** (State) _____
(Please Print) (Federal) _____

Mailing Address: _____
(P.O. Box/Street/Apt#) (City/Town) (Zip Code)

Please provide the information requested below for all animals held under your permit during the previous calendar year.

If you received any Threatened or Endangered species, there is a specific section for reporting for these species. Please do not include in Mammals, Birds, Reptiles, or Amphibian section.

Mammals:

Common Name (please be specific)	Number received into your facility	Disposition (enter the quantity of animals for each code) R	D	E	P	TR	TE	If transferred, list person where transferred

(Continue a separate sheet if necessary)

Revised July 2021

Birds: *You are legally required to have both state and federal permits if rehabilitating native migratory birds.*

Common Name (please be specific)	Number received into your facility	Disposition (enter the quantity of animals for each code) R	D	E	P	TR	TE	If transferred, list person where transferred

(Continue a separate sheet if necessary)

Reptiles:

Common Name (please be specific)	Number received into your facility	Disposition (enter the quantity of animals for each code) R	D	E	P	TR	TE	If transferred, list person where transferred

(Continue a separate sheet if necessary)

Amphibians:

Common Name (please be specific)	Number received into your facility	Disposition (enter the quantity of animals for each code) R	D	E	P	TR	TE	If transferred, list person where transferred

(Continue a separate sheet if necessary)

Threatened or Endangered Species: (please list each animal received individually)

Common Name (please be specific)	Date Received	Person submitting the animal to facility	Town where animal was found	Reason for submittal	Disposition (enter code from instruction sheet)	Disposition date	If transferred, list person where transferred

(Continue a separate sheet if necessary)

Overall Summary: (Please fill out completely)

Enter the total number of individuals for each category

	R	D	E	P	TR	TE	Row Total
Mammals							
Birds							
Reptiles							
Amphibians							
Threatened/Endangered							
			Total number of individuals handled during this year				

Did you have any unique cases or unusual disease issues, please list: _____

_____

_____

_____

_____

Please List all the volunteers, interns, or sub-permittees associated with your permit and facility during the past calendar year:

_____ Activities included in report ☐

_____ Activities included in report ☐

_____ Activities included in report ☐

_____ Activities included in report ☐

I certify that the information submitted in this report is correct to the best of my knowledge.

Signature:_____Date:_____Current email address: _____

Re-Authorization information: [only needed with first monthly activity report form in the new year]

If you wish to renew your state permit, please initial here: _____

If any of your contact information of physical location of your facility has changed, please use the space below to provide information for us to update your records. ** NOTE: if this involves updates to your facility please submit an updated facilities information form*

_____

_____

_____

Have you increased or added to your facility during the last calendar year? ☐ Yes or ☐ No **Are you requesting to add new species as a result of this addition?** ☐ Yes or ☐ No **If yes, have you had this addition inspected by the Department?** ☐ Yes or ☐ No

Did you participate in any Continuing Education activities during this past year? ☐ Yes or ☐ No If yes, please list below

_____

_____

_____

Has your emergency back-up plan changed? ☐ Yes or ☐ **No If yes, please provide your alternative plan.**

Continued Veterinary support

Veterinarian Practice Name and phone number: _____

Practice Address: _____
(P.O. Box/Street/Apt#) (City/Town) (Zip Code)

Veterinarian License Number: _____ State of Issuance: _____

I hereby affirm the following:

- I am personally acquainted with the permittee and am familiar with his/her activities related to wildlife rehabilitation.
- I agree to provide consultation and medical services for wildlife upon request of the permittee and subject to my professional judgment.
- I understand that I am under no obligation to provide free services; nor am I to be held responsible for the actions, judgment, or conduct of this permittee. This statement does not imply an endorsement of this permittee.
- I am authorized, but not required to visit the permittee's facility for periodic observations of both facility and wildlife patients.

Licensee Name: _____ Date: _____
(Please Print)

Signature: _____

VERMONT DEPARTMENT OF FISH AND WILDLIFE
One National Life Drive Davis 2 Montpelier VT 05620-3702
Phone 802-828-1000/Fax 802-828-1529

Wildlife Rehabilitation Monthly Report Form -- Instructions

Wildlife Rehabilitation Permittees are required to submit a monthly report.

You may submit your own spreadsheets, provided all the information required is submitted. If you have a federal permit, you may submit native migratory bird information via a copy of your federal report, *however*, this report should also include information for nonnative birds (such as rock pigeons, European starlings and English house sparrows), even though this information is not required on your federal report form.

Regardless of the format(s) in which you present the information, **you must also complete the last table, which includes an overall summary of animals you have handled during the past calendar year. If you are requesting to renew your permit than you must also sign, date, and indicate if you intend to renew your permit on the first form of the new year.**

Use the following codes to indicate disposition of animals brought into your facility:

R= Released (a healthy, recovered animal was returned to its natural, wild habitat) **E = Euthanized** **D= Died**

P= Pending (still in rehabilitation at your facility as of Dec. 31st)

TR= Transferred for Rehabilitation (an animal in need of continuing care was transferred to another rehabilitator)

TE= Transferred for Exhibition or Education (a non-releasable animal was transferred to an education or exhibition facility).

* Rehabilitators who are also exhibitors or educators may use this code to indicate a transfer of status from rehabilitation to exhibition/education within a facility.

Please include information for any animals you were granted approval to hold over from the previous calendar year.

Any individual animal transferred, please give the name and address of person (facility) receiving the animal

Examples of Continuing Education activities include: attendance at conferences, formal trainings, workshops, working with another more experienced rehabilitation facility, reading professional journals/newsletters/ articles

Please submit this Report to Hope Carey, no later than the 15th of every month. Failure to file a timely report may result in suspension of yourpermit.

Vermont Department of Fish and Wildlife
ATTN: Hope Carey
One National Life Drive Davis 2 Montpelier VT 05620-3702
or via email: Hope.Carey@vermont.gov

VERMONT DEPARTMENT OF FISH AND WILDLIFE
One National Life Drive Davis 2 Montpelier VT 05620-3702
Phone 802-828-1000/Fax 802-828-1529

Request for Time Extension for Possession of Animal(s) in Care

In accordance with the provisions of ***Title 10 V.S.A. § 4709. Transport, importation, possession, and stocking wild animals; possession of wild boar or feral swine****, the following document shall be submitted in order to possess an animal beyond the 6-month time limit of care and* ***Chapter 1: Game, Subchapter 1: General Provisions, App. § 9. Wildlife rehabilitation*** *is the rule outlining the qualifications and process for acquiring a rehabilitation permit and general duties and limitations for rehabilitators.*

Name of facility/permittee: _____
(Please Print)

Permit # (State)_____ (Federal) _____

Physical Address of facility: _____
(Street/Apt#) (City/Town) (Zip Code)

1. **Date of request:** _____
2. **Request is for what species?** *List all species included in this request* _____
   _____
   _____
3. **Number of individuals of each species included in this request?** _____
   _____
   _____
4. **Estimated age of individuals included in this request?** _____
   _____
5. **Please describe the specific situation or reason you are requesting an extension for care:**
   _____
   _____
   _____
   _____
6. **Proposed date release of subject animals:** _____

VERMONT DEPARTMENT OF FISH AND WILDLIFE
One National Life Drive Davis 2 Montpelier VT 05620-3702
Phone 802-828-1000/Fax 802-828-1529

Request for Time Extension - Application Instructions

As per, ***Title 10 V.S.A. § 4709*** *all rehabilitated wildlife must be released within 6-months of receipt of animal for care and rehabilitation. Use this form to request an extension of care if circumstances arise that requirean animal to be kept for longer than the 6-month time limit.*

This form must be filled out completely. Please use additional sheets if necessary to provide complete responses.

Question 1. This is the date of your actual request for time extension, not the date that you took the animal in for care. You should provide the date you took the animal in for care in your description of circumstances in Question 5.

Question 2. Indicate the species covered in this request for an extension of time to provide care. If you have multiple species that require an extension, you can include them in one form or on multiple forms.

Question 3. Indicate the number of each species in your possession that is included in this request.

Question 4. Indicate the estimated age of each species in this request. If there are multiple ages for a given species, please indicate how many of which age category in your possession to be included in this request.

Question 5. Briefly, but thoroughly describe the justification for requesting this time extension for care. Please note, that granting an extension beyond the 6-month normal time limit for care would be uncommon and requires a legitimate justification or extenuating circumstances. Some examples of circumstances where we would grant an extension, include: 1) receiving a nest of flying squirrels removed from an attic in December; 2) you received a racoon with a broken hind leg in late October, and your veterinarian recommended that this animal remain in your care until spring; 3) you receive a young-of-the-year skunk in October that appears severely emaciated and is likely only 2 months old; 4) a snapping turtle with a shell fracture that needs additional time to fully heal. ***note: be sure to include the date that you admitted the animal(s) in for care.***

Question 6. Indicate your proposed date of release. This date can be flexible or provided as a window, such as middle of May 2022. It is important that you consider weather, normal spring emergence for a given species, habitat requirements, time-of-day, etc…

Please submit this form:

Vermont Department of Fish and Wildlife
ATTN: Hope Carey
One National Life Drive Davis 2 Montpelier VT 05620-3702
or via email to: Hope.Carey@Vermont.gov

Appendix D. VDFW Wildlife Health Surveillance Plan

Any exposures, symptoms, or concerns regarding the diseases listed in the Wildlife Health Surveillance Plan below must be reported to a member of the appropriate disease response team.

Vermont Fish and Wildlife Department

Wildlife Health Surveillance Plan
For Mammals, Birds, Reptiles and Amphibians

Vermont Fish and Wildlife Department

Northeast Wildlife Disease Cooperative

August 9, 2021

Table of Contents

I. INTRODUCTION

Disease emergence and resurgence threatens the sustainability of health population levels and long-term survival for many wildlife species in the Northeast. Moreover, epizootics in wildlife may lead to pathogen spillover to new host organisms, including domestic animals and humans, and can erode biodiversity and threaten ecosystem health. Conversely, human activities, such as ecosystem alterations and the movement of pathogens, hosts, or vectors, often enhance the emergence and resurgence of diseases at the interface of wildlife, domestic animals, and humans. Wildlife disease surveillance, prevention, and control are crucial factors for safeguarding biodiversity as well as public and animal health in the region. The goal of the Wildlife Health Surveillance Plan is to strengthen the capacity of the Vermont Fish and Wildlife Department to identify and monitor diseases in wildlife in order to ensure that the state and region have sustainable and diverse wildlife populations for the future.

The wildlife division of the Vermont Fish and Wildlife Department (VFWD) has established Wildlife Disease Response Teams associated with three taxonomic groups – birds, mammals, and herptiles. Team members within each team are responsible for serving as the contact person for their respective species expertise as well as being able to respond to disease matters for the entire taxonomic group. The composition of the Mammals, Birds, Reptiles, and Amphibians Disease Response Teams is provided below (Tables 1, 2, and 3).

Table 1. Mammals disease response team composition, contact information, and species expertise.

MAMMALS DISEASE RESPONSE TEAM			
David Sausville, Chair			
Alyssa Bennett	Essex	(M) 802-353-4818	Small Mammals
Kim Royar	Springfield	(M) 802-747-8412	Furbearers
Nick Fortin	Rutland	(M) 802-793-8777	Moose & Deer
Tony Smith	St. Johnsbury	(W) 802-751-0108 (M) 802-661-8332	N/A
Tim Appleton	Barre	(W) 802-476-0198 (M) 802-793-5262 (H) 802-472-3054	N/A

Table 2. Avian disease response team composition, contact information, and species expertise.

BIRD DISEASE RESPONSE TEAM			
Doug Morin, Chair	St. Johnsbury	(M) 802-793-3837 (H) 603-837-3143	Nongame Birds (Except Colonial Waterbirds)
Dave Sausville	Essex Junction	(W) 802-879-5699 (M) 802-324-4206	Migratory Game Birds
John Gobeille	Essex Junction	(W) 802-879-5696 (M) 324-6096	Colonial Waterbirds (gulls, cormorants, herons,and terns)
Chris Bernier	Springfield	(M) 802-777-0823	Upland Game Birds

Table 3. Reptile and amphibian disease response team composition, contact information, and species expertise.

REPTILE AND AMPHIBIAN DISEASE RESPONSE TEAM			
Luke Groff, Chair	Rutland	802-760-0089	Reptiles
Mark Ferguson	Montpelier	802-279-3422	Amphibians

All wildlife disease investigations begin in the field, ideally at a time that is as close as possible to the onset of the disease. Therefore, this protocol is primarily directed at VFWD field and regional office employees who are the most likely to witness or respond to a disease event. The purpose is to provide guidelines for these personnel when presented with diseased wildlife, and to ensure that the highest quality samples reach the pathologist resulting in the most accurate and timely diagnosis.

II. PRIORITY SPECIES AND MORTALITY CIRCUMSTANCES

A. Introduction

It is common and normal for disease-related mortality to occur in wildlife species. To conserve resources, the VFWD will make every effort to distinguish between these and more significant mortality events that reflect the agency's priorities as described below. To that end, when a report is received describing any of the following situations, they are to be referred to the appropriate VFWD personnel (See Appendix 4). These personnel will provide guidance. At any time, personnel can also consult the NWDC Wildlife Veterinarian for instructions. Tables 4, 5, and 6 contains descriptions of significant events that are considered high priority by the VFWD.

B. Background

Wildlife species in Vermont and elsewhere are subject to a wide variety of endemic parasites and diseases that may impact individual animals or populations. Numerous emerging diseases are also appearing which have, or may eventually have, an impact on Vermont's wildlife and

potentially the human population as well. The emergence and spread of these diseases are often the result of human activity facilitating the movement of animals or pathogens. In addition, the changing climate is allowing various parasites and disease vectors, as well as the diseases they transmit, to spread or increase in abundance. These changes and their potential impacts to Vermont's wildlife and human populations require that disease monitoring and surveillance be a key component of wildlife management efforts in the state.

The species listed in Table 4-6 are native to Vermont and are considered priority species for a variety of reasons. They may be threatened, endangered, or species of special concern and the impacts of parasites and diseases could adversely impact the future survival of individuals as well as the viability of populations in Vermont. In other cases, the species are known to play a key role in zoonotic diseases that can be transmitted to humans and potentially result in sickness or death. They may also be species of significant ecological, economic, cultural, or historic importance in Vermont.

The diseases and symptoms associated with the species in Table 4-6 may already occur in Vermont, or they may not be known to occur yet, but are being detected in new locations nationwide. Some diseases may only impact the wildlife species they infect, while zoonotic diseases may have both wildlife and human health implications. Additionally, some diseases can affect both wildlife and domestic animals. Early detection of these diseases can help minimize the potential impacts on wildlife, humans, and domestic animals and is therefore an important concern for wildlife managers. While the Department is involved in monitoring and surveillance efforts for some diseases (e.g., White-nose Syndrome), reports from the public and other partners can provide valuable information on the occurrence of symptomatic animals. This plan is designed to help focus resources and prioritize and guide the Department's surveillance efforts.

C. Agency Priorities

The following tables (4, 5, and 6) provide information regarding the potential diseases and parasites, types of outbreaks that might be encountered, and agency priorities for each of the three species groups covered. Additionally, brief descriptions of possible samples to be collected and/or actions to be taken are provided. If the described situation warrants reporting, or additional guidance or information is needed, refer to Section III-A for appropriate contacts.

Table 4. Agency Mammal Disease Surveillance Priorities

Species	Diseases	Case Definition	No. of animals	Actions*
All	**Rabies**	**Neurologic signs including abnormal behavior and potential human exposure**	**Any**	**Test for rabies**
White-tailed Deer	CWD	Neurologic signs including abnormal behavior,reduced body condition	Any	Sample
	Other neurologic disease (e.g. BAS, rabies)	Neurologic signs including abnormal behavior	Any	Rule out rabies, necropsy
	Unusual mortality pattern (e.g. HD, starvation, fed)	Unusual location, timing; multiple animalsfound in same proximity Reduced body condition, hemorrhage (HD);associated with feeding	≥ 3	Necropsy
	Unusual lesions (*Demodex*, Bullwinkle)	Unusual swellings, hair loss	Any	Document*
	Exotic & Other disease (Foot & Mouth, bTB)	Blisters in oral mucous membranes or abovehoof (F&M), lung abcessation (bTB)	Any	Notify USDA VS/VT AAFM
Moose	CWD	Neurologic signs including abnormal behavior,reduced body condition	Any	Sample
	Brainworm (*P. tenuis*)	Neurologic signs including abnormal behavior	Any	Sample
	Winter tick	Weak or moribund, hair loss	Any	Necropsy
	Mortality of collared animals	Any mortality (including road kill)	Any	Necropsy
Black Bear	Rabies/brain storage disease	Abnormal behavior, neurologic (e.g. tremors)	Any	Sample
	Mortality in collared animals	Unknown cause of death or road kill	Any	Necropsy
	Unusual mortality in non-collared bears	Unusual location, timing; multiple animalsfound in same proximity	Any	Necropsy
	Unusual lesions, severe hair loss (Sarcoptic, Demodectic mange, other)	Hair loss, presence of skin lesions, crusty or scaly skin	Any	Consider scraping
	Hydrocephalus	Unusual head confirmation	Any	Consider necropsy
Lynx, cougar, large canid	Any cause of death	Found dead or euthanized (including road kill)	Any	Necropsy
Marten	Unexplained cause of death	Found dead (not roadkill or trapped)	Any	Necropsy
Muskrat, beaver, rabbits, squirrels	Unusual mortality (e.g. Tizzars, Tularemia)	Found dead, no apparent cause; unusual lesions in liver or spleen (Tularemia)	2	Necropsy
Rabbits and hares	RHDV/RHDV2	Lethargy, loss of coordination, seizures, blood staining on themouth, nostrils, or anus	Any	Necropsy

Species	Diseases	Case Definition	No. of animals	Actions*
Raccoons, grey foxes, skunks, fisher	Canine Distemper Virus	Neurologic signs including abnormal behavior, potential humanexposure, rabies negative	≥ 2 (found insame geographic area)	Consider necropsy**
Fisher, bobcat	Rodenticide	Found dead no apparent cause, internal bleeding apparent.	2	Necropsy Also consider annual testing of carcasses collected from trappers.
Mustelids, Felids	SARS CoV-2	Potential exposure to Covid 19 from rehabilitators, NWCO's, or trappers and/or signs of intestinal disorders and/or respiratorydistress.	Any	Necropsy
Bats	WNS	Unusual mortality pattern	≥ 10	Necropsy (USGS)
	Unexplained mortality	Unusual location, timing; multiple animals found in sameproximity	≥5	Consider necropsy**

*Each Disease and Case Definition acted upon should be documented and mapped, regardless of finding.
**The need for a field or lab necropsy is determined by the disease response team.

Table 5. Agency Avian Disease Surveillance Priorities

Species	Diseases	Case Definition	No. of animals	Actions*
Wild Turkey	Pox, LPDV	Found dead, reports of unusual lesions	Any	Consider necropsy**
	Unusual mortality	Unusual location, timing; multiple animals found in same proximity	≥ 3	Necropsy
Ruffed Grouse	WNV	Dead or injured from any cause	Any	Contact Upland Game Bird Leader
Waterfowl	Botulism	Found weak with neurologic signs or dead in summer, early fall; found together	≥ 5	Clean up carcasses,consider education
	Unusual mortality (e.g. Avian cholera)	Unusual location, timing; multiple animals found in same proximity	≥ 5	Necropsy
	Unusual lesions in hunter harvested birds		Any	Consider necropsy
Gulls	Unusual mortality	Unusual location, timing; multiple animals found in same proximity	> 5	Consider necropsy
Common Tern, Black Tern	Unusual mortality	Unusual location, timing; multiple animals found in same proximity	> 2	Necropsy
Loons / Gaviidae (SSC)	Lead poisoning, Avian malaria	Weak, found dead	Any	Necropsy
Bald and Golden Eagles	Unusual mortality	Weak, found dead	Any	Necropsy
Raptors	Unusual mortality (e.g	Unusual location, timing; multiple animals found in same proximity	>2	Consider necropsy

Species	Diseases	Case Definition	No. of animals	Actions*
	rodenticides, WNV, Trich)			
Double-crested Cormorants	Newcastle	Found dead, clinical signs	>5	Notify USDA WS
	Unusual mortality	Unusual location, timing; multiple animals found in same proximity	>5	Necropsy
Corvids (crows, ravens, jays)	Unusual mortality (incl. WNV)	Unusual location, timing; multiple animals found in same proximity	≥ 5	Necropsy
Passerines (finches, songbirds)	Unusual mortality (e.g.Salmonella, conjunctivitis, mycoplasma)	Unusual location, timing; multiple animals found in same proximity; clinical signs (ruffled feathers, drooping, etc)	≥ 5	Consider necropsy
Columbids (doves, pigeons)	Unusual mortality	Unusual location, timing; multiple animals found in same proximity	≥5	Consider necropsy

*Each Disease and Case Definition acted upon should be documented and mapped, regardless of finding.
**The need for a field or lab necropsy is determined by the disease response team.

Table 6. Agency Reptile and Amphibian Disease Surveillance Priorities

Species	Diseases	Case Definition	No. of animals	Actions*
Timber Rattlesnake North American Racer Eastern Ratsnake Eastern Ribbonsnake Smooth Greensnake	SFD Unknown	Unusual mortality, skin lesions, abnormal behavior (e.g. non-responsive)	Any	Consider necropsy** Document roadkill
Other snake species	SFD Unknown	Unusual mortality, skin lesions, abnormal behavior (e.g. non-responsive)	≥3 individuals at same location	Consider necropsy**
Spotted Turtle Spiny Softshell Turtle Wood Turtle	Ranavirus Mycoplasma	Unusual mortality (not winterkill), skin lesions, respiratory signs	Any	Necropsy Document roadkill
	Shell disease	Scute defects (not genetic), deep pitting lesions, soft spots, fluid under scutes	Any	Necropsy Document roadkill
Other turtle species	Ranavirus Mycoplasma	Unusual mortality (not winterkill), skin lesions, respiratory signs	≥3 individuals of one species at same location	Necropsy
	Shell disease	Scute defects (not genetic), deep pitting lesions, soft spots, fluid under scutes	≥2 individuals of one species at same location	Necropsy
Frog and toad species (adults and juveniles)	Bd Ranavirus	Usual mortality, skin lesions, abnormal behavior (e.g., lethargy)	≥5 individuals of one species at same location	Necropsy
Frog and toad species (larvae)	Bd Ranavirus	Unusual mortality	≥10 individuals of one species at same location	Necropsy
Mudpuppy(statewide)	Bd Bsal Ranavirus	Unusual mortality, skin lesions, skin redness,	≥5 individuals at samelocation	Necropsy

Species	Diseases	Case Definition	No. of animals	Actions*
		emaciation, abnormal behavior (e.g., lethargy)		
Mudpuppy (Champlain Basin)	Unknown	Found dead	<5 individuals	Document only
Eastern Newt	Bsal	Unusual mortality (not winterkill), skin lesions, skin redness, emaciation, abnormal behavior (e.g., lethargy)	Uplands: any Wetlands: ≥3 individualsat same location	Necropsy
Other salamander species(juveniles and adults)	Bd Bsal Ranavirus	Unusual mortality, hemorrhage, skin lesions,emaciation, abnormal behavior (e.g., lethargy)	≥5 individuals of one species at same location	Necropsy
Other salamander species(larvae)	Bd Bsal Ranavirus	Unusual mortality, skin redness	≥10 individuals of one species at same location	Necropsy

*Each Disease and Case Definition acted upon should be documented and mapped, regardless of finding.
**The need for a field or lab necropsy is determined by the disease response team.

III. ACTION PLAN

A. Reporting an Event and Seeking Guidance

When a wildlife morbidity/mortality event occurs that is considered high priority (Tables 4-6), staff should consult with the appropriate species lead biologist (Tables 1-3) and may also contact Wildlife Veterinarian Dr. Walt Cottrell (wocottrell@gmail.com) as needed, for guidance.

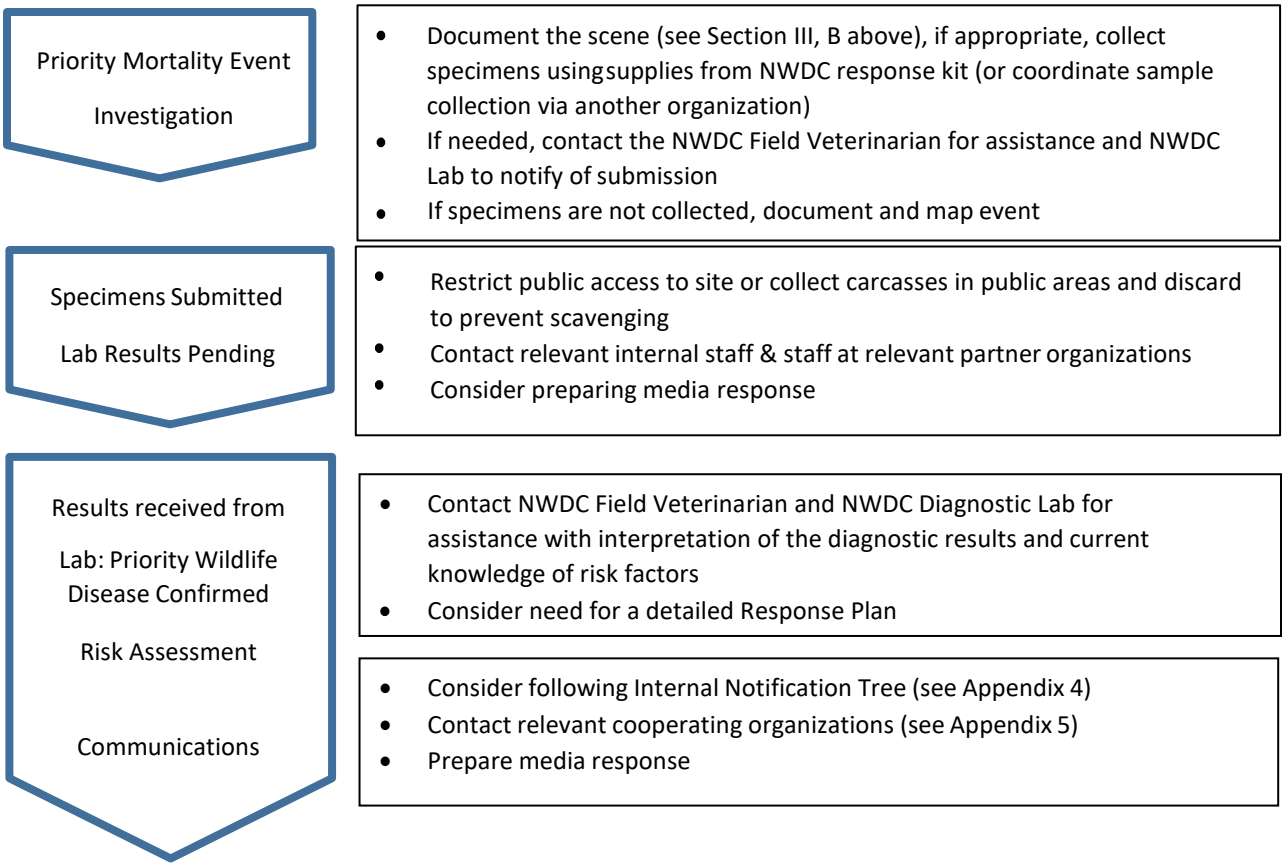
B. Information to Collect

There are many ecological factors that contribute to a morbidity/mortality event. Include the following information as part of any wildlife health investigation. This information is essential for obtaining a useful diagnosis. When a decision is made to submit samples, all of the following information should be entered in the NWDC online submission form (https://nwdc.wildlifesubmissions.org/).

- Date animal was found, date of investigation
- Disease onset date (if known)
- Species and number of sick or dead animals found
- Ages and sexes of sick or dead animals for each species
- Location (pond, field, stream, forest, etc.), county, address, GPS coordinates if available?
- Number, species, sex, age of carcasses/samples collected
- How was carcass/specimen stored (refrigerated, frozen, in formalin)
- Was the animal found dead, died in hand, or euthanized (if euthanized – what method?)
- If animal submitted is rabies suspect, was there domestic animal or human contact?
- What clinical signs were sick animals exhibiting (weak, lethargic, emaciated, diarrhea, blood at orifices, arched back, drooping wings, neurologic, found in wrong place or at wrong time)

- Any additional historical or ecological information that might be important for making a diagnosis (recent bad weather, fireworks, turbines, what the animals were eating, poisoning, etc.)

C. Action Plan Flow Chart



IV. ANNUAL REVIEW AND APPROVALS

Annual reviews of mortality events, specimen submissions, and diagnoses will be conducted by the team chair and incorporated into the wildlife disease federal aid report. This review should include assuring that all surveillance action results have been properly documented and mapped.

V. APPENDICES

Appendix 1. NWDC Guide to Specimen Submissions

Northeast Wildlife Disease Cooperative Guidelines for Wildlife Submissions from STATE AGENCY members

The mission of the NWDC is to preserve and protect regional biodiversity and ecosystem health by offering wildlife diagnostic services, expertise, training, and cutting edge research to its members.

STEP 1. Please contact either Dr. Walt Cottrell (wocottrell@gmail.com) or your NWDC laboratory diagnostician to discuss the potential case, and determine whether submission is warranted. For a general guide to determining diagnostic priorities, see Table 1 at the end of this document.

STEP 2. Once a decision is made to establish a case, please complete the NWDC Specimen Submission form for each animal or group of animals submitted. The form can be completed online at this URL: http://nwdc.wildlifesubmissions.org/

Filling out the Specimen Submission Form. Information from this form is used to compile a region-wide wildlife disease database; therefore, it is critical to complete all fields. A completed specimen history should include: the name, phone number (including area code), e-mail address, and mailing address of the finder; any observations of the behavior of the animal prior to death, details related to the carcass (e.g. dead in open field, dead under porch, found dead in dumpster), description of euthanasia technique if applicable, any details related to human or domestic animal contact with the specimen, your appraisal of the situation and/ or any testing requests beyond determining cause of death, and complete contact information for the submitter. In order to accurately map and track wildlife mortalities it is very important that precise location information is provided with the specimen including: GPS coordinates (Lat/Long in decimal degrees), street address, distance and direction from nearest cross street/landmark, Township, and County. If a group of carcasses of the same species are found in the same general location on the same day, one form will be adequate for submitted specimens. Once the form is completed, please print a copy to accompany the specimen being shipped or transported.

STEP 3. Contact your NWDC Laboratory staff before shipping or transporting any specimens to ensure proper handling and shipping, and to confirm that the laboratory is prepared to handle the case.

Refrigeration vs. freezing

Specimens that will be shipped or transported to a NWDC lab within 48 hours should be kept refrigerated. Freezing and thawing damages tissues and can complicate microscopic evaluation and the isolation of some pathogens. Freezing is recommended if the specimen has many active maggots or if it cannot be delivered within 48 hours. During mass mortalities it is a good idea to freeze a subsample (3-12) of the freshest carcasses in case a toxicant is involved.

General guidelines for specimen packaging, transport, and shipping. Potentially diseased carcasses need to be packaged to prevent the leaking of body fluids that may contaminate vehicles or coolers. At a minimum, carcasses the size of a raccoon, fox, or smaller should be individually bagged in two separate 3 or 4 mil plastic bags with the open end twisted and tied in a tight knot. Beaks, teeth, and claws will puncture the bags; tucking the beak of a bird under the wing or strategic positioning the feet prior to bagging may help alleviate bag punctures. Layers of newspaper or other absorbent paper will help prevent beak and claw punctures and will also absorb body fluids. Carcasses larger than fox or raccoon should be bagged in suitable sized 3 to 6 mil plastic bags with enough room to close the bag with twist and knot or twist and secure with duct tape. Large 4 X 8' 6 mil bags should be used for all deer carcasses. Large bagged carcasses, or multiple bagged carcasses, should be transported in plastic tubs to contain any fluids from leaking bags. All bags will eventually leak, especially if the carcass is frozen, so use as many bags as necessary. A copy of the specimen submission form should be included in a separate plastic bag inside the box but outside of the specimen bag.

Shipping
All shipped specimens need to be properly packaged to prevent leaks and should be shipped in a rigid plastic cooler; the cooler should be lined with a plastic bag and absorbent material (newspapers or absorbent pads), and re-usable ice packs or water frozen in sealed plastic bottles should be used to keep specimens cool. DO NOT SHIP ICE CUBES or loose ice. Frozen specimens typically do not need ice packs unless it weighs less than 2 lbs. The plastic cooler lid should be sealed/secured with packing tape and enclosed in a cardboard box (to avoid a UPS surcharge). On the outside of the box attach a UN3373 Biological Substance Category B label or download and print from the Members section of the NWDC website under, "Specimen Submissions." Please ship plastic coolers inside a cardboard box to avoid courier surcharges. The list of NWDC laboratory shipping addresses is provided on Page 5 of this document.

Direct Transport
Large specimens or specimens from mass mortality events can be delivered to your designated NWDC laboratory. Alert the lab that you are delivering a large specimen and give your estimated time of arrival. The specimens should be bagged and tagged as described above and transported in the blue plastic mortar mixing tubs. Moose are typically transported in an open bed pick-up truck or on a trailer. If possible, wrap the head in an absorbent pad and bag the head with a suitable sized bag and duct tape to contain leaking blood or rumen contents. In warmer months try to keep the head cool with ice packs and keep the carcass out of the sun.

STEP 4. What Happens After a Specimen is Submitted. When a carcass is submitted, a gross necropsy will be done and, within one business day of the necropsy, the diagnostician will contact the biologist who submitted the specimen by email or phone to discuss next steps. Once histology results are back, the diagnostician will contact the submitter to make recommendations on ancillary testing and to provide estimated costs for any additional testing. If only tissues are submitted (as in the case of a field necropsy), the diagnostician will discuss recommendations for testing. In all cases, any additional, key preliminary results will be communicated to the submitter as they are completed. The submitter, not the diagnostician, is responsible for communicating these results to other relevant staff within their agency. Depending on the complexity of the case, an Interpretive Final Report will typically be provided within 30 days of

submission. NWDC diagnosticians are responsible for notifying all relevant agencies of any reportable diseases.

All diagnostic data will be entered in the NWDC Wildlife Health database.

NWDC LABORATORY CONTACT INFORMATION

Dr. Inga Sidor, Inga.Sidor@unh.edu, 603-862-2726
Dr. David Needle, David.Needle@unh.edu, 603-862-0057
Dr. Brian Stevens, Brian.Stevens@unh.edu, 603-862-3535
New Hampshire Veterinary Diagnostic Laboratory
NHVDL Kendall Hall, 129 Main St.
Durham NH 03824

NWDC LABORATORY SHIPPING ADDRESSES

New Hampshire Veterinary Diagnostic Laboratory
NHVDL Kendall Hall 129 Main St.
Durham NH 03824

NWDC Guidelines for Shipping

- Fill out the specimen submission form and place a second copy of the specimen submission form in a Ziplock bag and seal. Tape to the inside lid of the shipping container.
- Place each tagged carcass in an individual plastic bag. Arrange claws, beaks, and teeth to minimize bag punctures. Close and seal the bag.
    - Cover sealed zipper bag openings with tape (duct or strapping).
    - Twist non-zipper bags closed; tie, and fold over on itself. Secure with tape.
- Place the 1st bag inside a 2nd bag, close and seal. More than 1 bagged animal can be put inside the 2nd bag. Add absorbent materials (absorbent pads supplied for CWD tissue extraction, disposable diapers, paper towels, newspapers) to the inside of the 2nd bag to soak up liquids and pad the carcasses.
- Line a cooler with a 3rd bag and place frozen ice packs (NOT ice cubs or dry ice) in the bottom of the bag. Use enough to keep the carcass cool.
    - Ice packs can be obtained from hardware, sporting goods, or grocery stores.
    - Frozen water can be used if sealed in a plastic container (soda/water bottle).
- Seal the 3rd bag and tape the end shut.
- Tape shut (packing, strapping or duct tape) with a continuous wrap around the cooler lid and a wrap at each end. Coolers must be encased in a cardboard box. Hard-sided coolers can be disinfected and returned.

Shipping to NWDC Laboratories:

- **Two labels must be affixed to every cooler:**
    1. Use the appropriate shipping label for your designated NWDC Lab.
    2. Coolers must also have a **UN 3373, BIOLOGICAL SUBSTANCE, CATEGORY B** label attached to show they are biological specimens. The label can be downloaded and printed from the NWDC website under "Specimen Submission" (https://sites.tufts.edu/nwdc/members/submissions/)

DELIVER OR SHIP CARCASSES WITHIN 24-48 HOURS OF COLLECTION TO ENSURE THE BEST RESULTS. FREEZE CARCASSES IF UNABLE TO SHIP OR DELIVER WITHIN 48 HOURS.

Appendix 2. NWDC Wildlife Disease Investigation Field Kit Contents and Location(s)

Kit Contents

Item	Number per kit
Fiskars Bypass Lopper	1
Fiskars Titanium Bypass Pro Pruner	1
Scalpel blades #22, 100 per pak	1 pack of 100
#4 blade handles (stainless steel)	3
Dissection Scissors - Blunt blunt straight 6-1/2"	2
Forceps - rat tooth 6 "	2
boning knife Forschner 6" Boning Knife - Victorinox	1
Victorinox Cutlery 9-Inch Round Sharpening Steel, Black Plastic Handle	1
General-Purpose Coveralls With Tyvek, large (25 pk)	12.5 (1/2 box of 25)
General-Purpose Coveralls With Tyvek, Xlarge	12.5 (1/2 box of 25)
General-Purpose Coveralls With Tyvek, XXlarge	12.5 (1/2 box of 25)
Tyvek boot covers, Large pack of 100	12.5 (1/2 bag 25)
safety glasses	2
Sperian one-fit healthcare N95 particulate respirator and surgical mask	2 boxes of 20
nitrile gloves (S, M, L, XL)	1 box of 100 each size
Cooler (50 quart Coleman) with wheels	1
Blue Ice (Rubbermaid 1080-16-220 Blue ice module ice pak)	2
Sharps container (2 gallon)	1
Cutting board (15 1/2 x 9 1/2")	1
Whirl-Pak bags (710 ml/24 oz)	50 bags
Whirl-Pak bags (207 ml/ 7oz)	100 bags
Whirl-Pak bags (384 ml/13 oz)	100 bags
Pencils	1 box
Sharpie fine point	2 containers of 5 pens
Sharpie extra fine point	1 box
Aluminum clipboard with storage space	1
Carcass tags	1 pack of 100
Photo ruler	2
Field notebook - Rite in Rain	2
flagging tape	1 roll
Hand Sanitizer (Purell 12 oz)	2
Concentrated bleach (Clorox 121 oz)	1
Paper towels (roll)	1
Trash bags (42 gallon heavy duty contractor bags)	1 box of 32
Plastic collection bags (Ziploc, gallon size)	2 boxes of 40
Plastic collection bags (Ziploc, Quart)	1 box of 50
Plastic collection bags (Ziploc XL Heavy duty bag)	2 boxes of 4 bags
Bio hazard bags (23 x 23 in)	1 bag of 50
Duct tape (60 yard roll)	1 roll
Strapping tape (24 mm x 55m)	1 roll
Cable Ties (GB 50098 electrical assorted ties)	1 pack of 500
4 oz specimen containers (for samples in formalin) sterile	50 indiv containers

Item	Number per kit
500 ml wide mouth Nalgene bottle (for formalin)	2
20 cc syringe regular tip	1 bag of 25
22" toolbox	1
Homer buckets	1
Avian, Mammalian, Turtle Necropsy Datasheets	10 copies of each
NWDC Submission Guidelines	1 copy each
Kit Inventory, Illustrated key to kit, Necropsy supply checklist	1 copy of each
UN3373 shipping label/Biological Substance Label	12 each type of label

Wildlife disease field kits are located at each of the five district VFWD offices. Wildlife disease response teams individuals responsible for the exact location and maintenance of supplies for each kit are:

Barre: Tim Appleton

Essex Junction: Dave Sausville

Rutland: Nick Fortin

Springfield: Chris Bernier

St. Johnsbury: Tony Smith

Appendix 3. History of Mammal Disease Surveillance by VFWD

The following information was provided by the primary wildlife disease laboratories serving VFWD: the Northeast Wildlife Disease Cooperative and the USGS National Wildlife Health Center in Madison, Wisconsin. All results from NWDC diagnostic labs are accessible to members at the NWDC Wildlife Health Database.

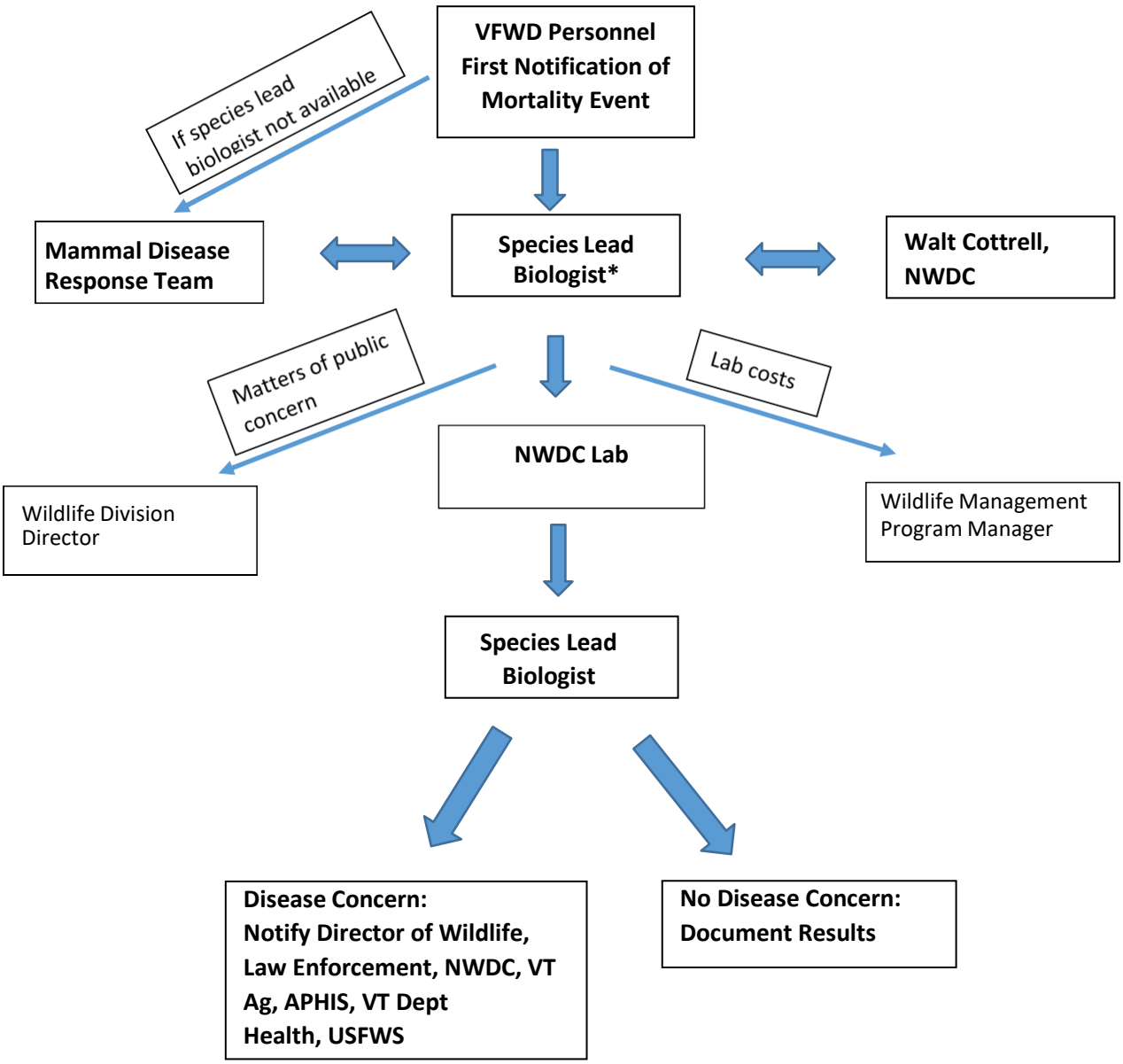
A. Records from the Northeast Wildlife Disease Cooperative

Date	County	Town/Municipality	Species	#	Diagnosis	Other/comments

B. Records from the USGS National Wildlife Health Center

Date	County	Town/Municipality	Species	#	Diagnosis	Other/comments

Appendix 4. Internal Notification Tree



*Lead Biologists:
Deer / Moose: Nick Fortin
Small Mammals: Alyssa Bennett
Furbearers: Kim Royar
Black Bears: Jaclyn Comeau

Below is a table of relevant organizations in Vermont and their role (potential or actual) in wildlife disease events.

Organization	**Role**	**Context**	**Contact(s)**
Public Health	R	Rabies, zoonoses	State Public Health Veterinarian: Natalie Kwit
Wildlife Rehabilitators	R (+/-)		Maj. Justin Steadman
USDA WS	R/P	Rabies, diseases	Wildlife Services Coordinator: Fred Pogmore
USFWS	R/P	Federally Listed Species, National Wildlife Refuges	Field Office Supervisor: Tom Chapman Federal Agent Eric Holmes, Conti NWR Steve Agius, Missisquoi NWR Ken Sturm
Game Wardens	R/P	Surveillance, Investigation	
Animal Control Officers	R (+/-)		
Police departments	R (+/-)		
Dept of Agriculture	R	Domestic Animal Diseases	State Veterinarian: Kristin Hass
NGOs (VT Audubon, VT Center for Ecostudies	R		
State forests/parks	R (+/-)		
Dept of Environ Conservation, Fisheries Division	R (+/-)		
Mammals Scientific Advisory Group		Diseases	William Kilpatrick

Appendix E. AVMA Guidelines for the Euthanasia of Animals

https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf

Appendix F. Vermont Rabies Management Guidelines

https://www.healthvermont.gov/disease-control/zoonotic-diseases/rabies

Appendix G. Useful Links for Wildlife Rehabilitation in Vermont?

VFWD Licensed Wildlife Rehabilitators List and Map

Becoming a Wildlife Rehabilitator in Vermont

Vermont Wildlife Rehab Regulations

Wildlife Diseases in Vermont

Vermont Animal Importation and Possession Rules

Vermont Institute of Natural Science: www.vinsweb.org

Bonneyvale Environmental Education Center: www.beec.org

Vermont Veterinary Medical Association: www.vtvets.org

US Fish and Wildlife Service: www.fws.gov

USDA Wildlife Services

National Wildlife Rehabilitators Association: www.nwrawildlife.org

EDUCATION SITES FOR REHABILITATORS

https://wildlife.tufts.edu
https://www.newildlife.org
https://www.wraminc.org
https://www.nwrawildlife.org
https://theiwrc.org
https://www.mass.gov/wildlife-rehabilitationHOTLINE FOR WILDLIFE.ORG– 508-375-3700
FROGHOLLOWFARM.ORG

Appendix H. Minimum Standards for Wildlife Rehabilitation

https://cdn.ymaws.com/www.nwrawildlife.org/resource/resmgr/Min_Standards/MinimumStandards3rdEdition.pdf

Appendix I. Example Statement of Emergency Plan

In the rare even that: an animal in your care escapes captivity; you are unable to care for wildlife in captivity because of absence, illness, or death; there is severe damage to your facility (due to fire, wind, floods, etc.); animals are dying from an unknown disease or virus; or animals are attacking or injuring humans, other animals or property:

I, _____ have the following contingencies in place.
Permittee Name (Please Print)

1. A complete and accurate list of animals currently housed at my facility located in this specific location:

   _____

2. The following permitted individual(s) are willing to take-in and care for any animals from item #1 in the event of an emergency:

   Name: _____ Permit #_____

   Name: _____ Permit #_____

   Name: _____ Permit #_____

3. I have the following capture equipment and weapons available to use for escaped animals:

   _____

   _____

   The gear is located at: _____

   _____

   Detailed instructions and circumstances for which the gear is to be used:

   _____

   _____

   _____

   _____

4. In the event of a potential exposure to a disease or virus (i.e., Covid/RHDV2), I will take the following steps and call:

   _____

   _____

Appendix J. Special Considerations for the Rehabilitation of Lagomorphs

Three possibly four species of lagomorphs (i.e., rabbits and hares) have the potential to be brought to wildlife rehabilitation facilities in Vermont. Each species has a different conservation status in the state, and therefore, rehabilitation procedures and policy differ between the species:

New England cottontail (*Sylvilagus transitionalis*): *State Endangered species*.

The New England cottontail is rare, possibly extirpated in Vermont. The New England Cottontail is the only rabbit native to the northeastern United States east of the Hudson River Valley of New York including New England. Its range has contracted by an estimated 86% since 1960. Outside of Vermont, only five smaller populations occupy its historic New England range. The cottontail is recognized as a SGCN in the Wildlife Action Plans of all New England States and New York. In 2006 it was designated a candidate for listing under the federal Endangered Species Act.

The New England Cottontail is listed as a Regional Species of Greatest Conservation Need among the 13 Northeastern states. A regional effort has been mounted to restore the New England Cottontail ((http://www.newenglandcottontail.org/).

The New England cottontail was abundant in Vermont prior to the 1940s, however, the species was last documented in the state in 1946. Widespread introductions of the eastern cottontail (Sylvilagus floridanus) and habitat changes have resulted in apparent competition and possibly hybridization with eastern cottontails. Despite concerted trapping efforts in Vermont, no evidence of New England cottontails has been found since 1991. Should a rehabilitator take in a rabbit that appears to be a New England cottontail, they should contact the Department immediately.

Eastern cottontail (*Sylvilagus floridanus*): *non-native, invasive species*.

This species was introduced into the state and has been known to outcompete and displace the native New England cottontail. It is common in the Champlain and Connecticut River Valleys and may move to higher elevations as the climate warms.

Snowshoe hare (*Lepus americanus*): *abundant/ found statewide*

The Snowshoe hare experiences cyclical population changes on a10-year period mostly in the northern parts of its range. Populations near the southern limits of its range, including Vermont, are believed to be less cyclical. Early successional softwood and mixed softwood-hardwood patches are critical habitats. Dense softwood and hardwood understory cover is highly important as it provides feeding, escape, and thermal cover for hares (Carreker 1985, Litvaitis et al. 1985). Forest succession and an overall decrease in active forest management practices in recent decades (Morin et al. 2014) has led to a reduction in suitable habitat and a decline in the state and regional Snowshoe Hare populations. Furthermore, changes in the climate that produce anomalously warm temperatures and decreased snowfall may diminish

the hares' competitive advantages leading to higher predation rates and chronic declines in hare abundance (Schmitz et al. 2003). Consequently, lower hare populations may affect other wildlife species that rely on abundant hare populations as a source of prey (Chapman and Feldhamer 1982). The Snowshoe Hare is a keystone species in the northern transitional and boreal forest. If it should disappear, many species of predators would go with it and the structure of the plant community would be altered substantially (Krebs et al. 2001). Snow shoe hare prefer large expanses of forest habitat, with low brushy cover and needs diverse forest size/age classes for feeding and cover. S5 G5

Domestic (or European) rabbit (*Oryctolagus cuniculus*)**:** *Occasional escapees or intentional releases into the wild.*

Should be returned to owner (if found) or brought to a local animal shelter. Will not bereleased in the wild.

Identification of Species:

Identification between the four species can be extremely difficult. Following an intake of either cottontail species, or if the wildlife rehabilitator has any doubt of the species identity of a lagomorph (or any other species) they must contact their local regionalwildlife biologist who can assist with identification.

Appendix K. Rabbit Hemorrhagic Disease Virus 2 (RHDV2)

American Fish and Wildlife Guidance

Frequently Asked Questions Involving Wild Rabbits and Hares

What is Rabbit Hemorrhagic Disease Virus 2? Rabbit Hemorrhagic Disease Virus 2 (RHDV2) is a highly contagious calicivirus affecting domestic rabbits and wild species in the taxonomic order Lagomorpha. RHDV2 is a Foreign Animal Disease that has appeared periodically in North America and has a high case fatality rate.

Where has RHDV2 been found? RHDV2 initially occurred in North American domestic rabbits in Vancouver, Canada (2018) and was subsequently identified in Ohio (2018) and Washington (2019-present, and New York (2020). The virus appeared later in 2020 in domestic rabbits in Arizona, Nevada, New Mexico, New York, Utah, and Texas. RHDV2 was first confirmed in wild black-tailed jackrabbits and cottontail rabbits in the United States in April 2020. As of June 2020, RHDV2 has been confirmed in wild populations in Arizona, California, Colorado, Nevada, New Mexico, Texas, and in 5 northern states of Mexico. The source of the recent RHDV2 outbreaks has not been identified.

How do I know if a rabbit has RHDV2? Sudden mortality in otherwise healthy rabbits is characteristic of RHDV2. Observation of sick rabbits prior to death is rare, but sick rabbits may be lethargic and reluctant to move. Infected rabbits die within 1 day to 2 weeks after becoming infected. The virus kills 70-90% of infected rabbits. Rabbit carcasses may have bloody discharge from the nostrils and/or mouth or have no external signs.

How is RHDV2 spread? RHDV2 is highly contagious and can spread through direct contact with infected rabbits or indirectly through contact with infected carcasses, blood, urine, and feces. The virus can also be present on contaminated surfaces such as cages, feed, water, and bedding. Insects, scavengers, predators, and birds can also spread the virus by contact with infected rabbits or carcasses.

The likely path of the disease getting to Vermont is through a domestic rabbit, imported rabbit products, or by people coming back to Vermont from those western states that have the virus. VFWD is working with the VT Agency of Agriculture, who regulates the domestic rabbit trade in the state, to minimize the threat of the virus spreading from domestic rabbits to wild rabbits in Vermont. Here is what you can do to prevent the virus from getting to Vermont:

Contact your local state wildlife office to report your finding to a biologist, game warden, or wildlife veterinarian. Dead domestic rabbits should be reported to the state veterinarian. Please follow the disposal guidance provided by your state wildlife or agriculture agency.

1) When a rabbit is brought to a rehabilitator it should be definitively identified as a wild rabbit, that no exposure to domestic rabbits has occurred, and has been quarenteened for ??? weeks). Kim will call WS and AG to see if they have a protocol for rehabilitation from other states.

2) If you own pet rabbits, do not let them mingle with wild rabbits. Keep their quarters clean and use disinfectants regularly. Do not release domestic rabbits into the wild. (i.e. physical barriers must be in place and/or domestic animals must be cared for inside the house while wild rabbits should be rehabilitated in a separate building)

3) Wildlife Rehabilitators should not let wild rabbits in their care come into contact with domestic rabbits or their cages, food dishes, or any other rabbit items. All rabbit equipment including cages, food and water dishes, and other materials should be cleaned with a bleach solution or anti-bacterial soap before being used again for a different rabbit.

4) If you find a dead rabbit in the wild, do not touch it. If you see more than 1 dead rabbit report it to VFWD.

How long can the virus live in the environment? RHDV2 is very persistent and stable in the environment. It is resistant to extreme temperatures and can survive freezing. The virus can survive up to 15 weeks in dry conditions.

What wildlife species are susceptible to RHDV2? Only Lagomorphs are susceptible to RHDV2, which has 2 families: the Leporidae (hares and rabbits) and the Ochotonidae (pikas). In North America, RHDV2 has been confirmed in wild black-tailed jackrabbits, desert cottontail rabbits, mountain cottontail rabbits, and antelope jackrabbits. Experiments have shown eastern cottontails (*Sylvilagus floridanus*) are susceptible to infection and mortality. No other species of wildlife are known to be susceptible.

Can RHDV2 infect humans? RHDV2 only affects Lagomorphs. Humans are not susceptible; however, sick wildlife of any species should not be consumed. Hunters who may have contact with live domestic rabbits should shower and change clothing as soon as possible after cleaning game. Rabbits and other wildlife can transmit zoonotic diseases such as tularemia) and plague to people. People handling live or dead wildlife should always wear appropriate personal protective equipment (PPE) including, at a minimum, nitrile or latex gloves.

(https://www.cdc.gov/tularemia/index.html

https://www.avma.org/resources/public-health/disease-precautions-hunters#tularemia

What should I do if I find a sick or dead wild rabbit? If you find sick or dead wild rabbits, please contact your local state wildlife office to report your finding to a biologist, game warden, or wildlife veterinarian. Dead domestic rabbits should be reported to the state veterinarian.

Where can I get more information on RHDV2? Current information on RHDV2 can be found on United States Department of Agriculture APHIS webpage.

Appendix L. Covid and Wildlife

SARS CoV-2 (Covid 19) and Mammals (other than bats)

Vermont Interim Guidelines for Rehabilitation, Research, and Release of Mustelids, Felids, and Canids

June 9, 2020

Overview

"O*ur knowledge is expanding very rapidly concerning coronaviruses however, there is much more that we still do not know. To date a few captive mammals and pets have been infected with SARS-CoV-2 (the equivalent of Covid-19 in mammals), including a tiger at the Bronx zoo (likely also some lions at the same facility), mink in fur farms in the Netherlands and dogs and cats (China, Europe, USA). Experimental inoculations have shown that this virus replicates very well in-house cats and ferrets but not very well in dogs, chickens, turkeys, or ducks*." (Dr. William C. Kilpatrick, pers. Com). It is not known yet whether SARS-CoV-2 can/will affect wildlife populations in North America and/or to what extent it could spread through a population. (USGS, 2020).

Mustelids such as mink seem to be especially sensitive to the coronavirus. (https://www.wur.nl/en/Research-Results/Research-Institutes/Bioveterinary-Research/show-bvr/Questions-and-answers-regarding-infection-with-COVID-19-in-mink.htm). Researchers in the Netherlands found that ferrets can pass the virus from one individual to another via inhalation. There is speculation that other mustelids closely related to ferrets, such as mink, weasels, fisher, etc. may also be susceptible to the virus and able to pass it from one to the other. The transmission of SARS-CoV-2 was confirmed on mink farms in Europe. In addition, two employees were also infected with the virus by mink and that the virus has been passed from humans to mink and back again to humans.

Although currently there is no indication of spill over into new hosts and species such as raccoon currently seem to be resistant, there is a possibility that as the virus progresses, additional species could be susceptible. It is currently believed that SARS-CoV-2 can be transmitted through saliva, respiratory tract (breath / aerosol) and feces. (EAZWV, March 17, 2020). Susceptibility to the virus by various species is still unknown and likely will remain in question for months, if not years therefore we will need to proceed with an abundance of caution to protect both humans and wildlife populations.

Recommendations for Rehabilitators

The Department of Fish and Wildlife values the work done by the state's generous rehabilitators. However, wildlife is a public resource and it is imperative that we ensure that there is no risk to populations as a result of these activities. Therefore, through an abundance of caution, we have developed the following recommendations. The USGS and the World Health Organization (WHO) suggests that decisions on which PPE are used should be based on an assessment of potential risks presented by both known and unknown pathogens relevant to the proposed work. A recent publication by the Association of Fish and Wildlife Agencies (AFWA) Fish and Wildlife Health Committee also recommends appropriate PPE when in close contact with any of the above referenced species. As stated above, there are a lot of unknowns related to the potential spread of CoV-2 between humans and wildlife and vice versa, therefore any recommendations likely could change going forward as the science matures. The bullets below outline the current suggestions for appropriate safety protocols:

- People who are suspect or confirmed to have SARs-CoV2 should avoid any contact with captive animals. Any animal in contact with an infected human will not be released back into the wild.
- Personal Protective Equipment (PPE), consisting of (at minimum), disposable or reusable gloves that can be decontaminated and a mask (e.g., surgical or homemade cloth mask) or respirator (e.g., N95 mask) is required when handling live mustelids, felids, or canids that may potentially be released back into the environment. Disposable exam gloves or gloves that can be decontaminated (e.g. rubber dishwashing gloves) using an alcohol-based solution containing at least 70% alcohol, 1:9 bleach solution, or EPA-registered disinfectant should be used to prevent the spread of pathogens between animals, from animals to humans or vice versa. Cloth masks can be washed with a detergent in hot water. If reusing filtering face piece respirators (e.g., N95 masks), rotate their use so they are worn only once every 5 days and stored in breathable paper bags between uses. If you do not have access to adequate PPE, you should not handle live mustelids or felids that may potentially be released.
- Washable or disposable coveralls, or a change of clothing and footwear, can be used to prevent movement from one site to another.
- Washing hands before and after contact with wildlife, their food or supplies is critical. Avoid any close contact whenever possible.
- Maintain social distancing and outside interactions with vulnerable species as much as possible.
- To avoid exposure to free ranging wildlife populations, any animal exhibiting the following symptoms will **not** be released back into the wild but will be euthanized:
    - Diarrhea and intestinal disorders
    - Respiratory syndromes, either from upper tract (like common cold) or deeper like bronchopneumonia. (EAZWV, 2020)

References

European Association of Zoo and Wildlife Veterinarians (EAZWV) Infectious Diseases Working Group, SCIENCE-BASED FACTS & KNOWLEDGE ABOUT WILD ANIMALS, ZOOS AND SARS-COV-2 VIRUS

Fish and Wildlife Health Committee, Association of Fish and Wildlife Agencies. Covid-19 and North American Species of Mustelidae, Felidae, Canidae. June 2020. 2 pgs.

Sleeman, Jonathan, USGS National Wildlife Health Center Memo, NWHC Operations During the COVID-19 Pandemic and Information About Coronaviruses in Wildlife, National Wildlife Health Center, Wildlife Health Bulletin 2020-03, 3 pgs.

Wageningen Bioveterinary Research (WBVR), Questions and answers regarding infection with COVID-19 in mink, https://www.wur.nl/en/Research-Results/Research-Institutes/Bioveterinary-Research/show-bvr/Questions-and-answers-regarding-infection-with-COVID-19-in-mink.htm

World Health Organization for Animal Health, https://www.oie.int/en/scientific-expertise/specific-information-and-recommendations/questions-and-answers-on-2019novel-coronavirus/

Authorized by:
Christopher A. Herrick, Commissioner Date

4/26/2022