

**Threatened & Endangered Species Takings Permit**

Statutory Authority: 10 VSA § 5408

**1. Permittee****Glenn Gingras****Vermont Agency of Transportation**One National Life Drive, Davis 3, Montpelier, VT 05633-5001  
802-**2. Permit Period****Effective Date:** 10/1/2019**Expiration Date:** 1/1/2021**Authorization #:** EH-2019-35**Amendment #** 0**2. Principal Officer:** Joe Flynn.**3. Subpermittee(s):** Matt Arsenault, Polly Harris, Trever Peterson, Alex Pries of Stantec Consulting; VTrans staff and contractors.**4. Authorized Species:** Drummond's Rock-cress (*Boechea stricta*), Bronze Sedge (*Carex foenea*), Eastern small-footed bat (*Myotis leibii*), Little brown bat (*Myotis lucifugus*), Northern long-eared bat (*Myotis septentrionalis*).**5. Authorized Activity:** the incidental take of the species listed in section 5 during efforts to reduce the potential for rock debris to harm motorists.**6. Location of Authorized Activity:** Rock ledges adjacent to southbound I-91 (mile marker 92.7) just north of Fairlee. Off-site location(s) for storing, germinating and out-planting the seeds of Drummond's Rock-cress and Bronze Sedge.**7. Findings**

- A. The Permittee applied for a Threatened & Endangered Species Takings Permit under 10 V.S.A. § 5408 to authorize the incidental take of the species listed in section 5.
- B. The Permittee identified a threat to passing motorists from rock and debris falling from a rock ledge above the southbound lanes of I-91 in Fairlee and reported that a collision between falling rocks and a tractor trailer occurred earlier in 2019.
- C. To minimize this threat the Permittee proposes stabilizing the ledge by removing loose rocks and drilling metal support rods into the rock face; and installing netting to keep loose rock from reaching the road.
- D. In July 2019 acoustic surveys for bats conducted by the Permittee's consulting biologist identified the likely presence of eastern small-footed, northern long-eared, and little brown bats. During the same period as the acoustic surveys, visual emergence surveys and infrared camera monitoring did not detect bats leaving the rock face at dusk. A cave-like structure below the ledge that could possibly serve as a roost site or hibernaculum was also found.
- E. On August 1, 2019 the Permittee's consulting botanist mapped the locations of 18 bronze sedge individuals in 3 sub-populations, and two Drummond's rock-cress individuals in two locations, and Fernald's sedge (*Carex merritt-fernaldii*) all in the Project area.
- F. On August 9, 2019 the VFWD Botanist identified a total of 18 individual bronze sedge at three locations and a 2nd location for Drummond's rock cress for a total of five (5) rock-cress found. The botanist also collected bronze sedge seeds for later germination and out-planting. A complete inventory was not feasible without a close-up inspection of the vertical rock face.
- G. On September 19, 2019 the VFWD Bat Biologist inspected the cave on the project site. Full inspection of the cave was limited by narrow constrictions just inside the opening, but the cave appeared suitable for use as a bat hibernaculum.

**Takings**

- H. **Plants:** Four of the five Drummond's rock-cress individuals and an undetermined number of bronze sedge will likely be taken by trampling, falling rocks, and/or by physical removal of the rock ledge during the project. Because the roots of these plants are growing in tight crevices between rocks, digging out the plants for transplantation does not appear feasible.
- I. **Bats:** There is some likelihood of taking of individuals of eastern small-footed, little brown and northern long-

eared bats if they are using the rock ledge as daytime roosts; and noise and the presence of workers could possible cause some bats to leave the area. The likelihood of a bat being hit by falling rock is very low. Takings could occur if the removal of rock from the ledge alters or eliminates areas bats use for as roosting habitat; and/or if rock-fall covers the cave below the ledge preventing bats from accessing the cave for summer roosting or use as a winter hibernaculum.

#### Avoidance and Minimization

- J. Plants:** To avoid and minimize potential impacts to listed plants, each of the Drummond's rock-cress and bronze sedge found in the project area will be flagged or fenced-off by the Permittee's botanist in advance. Work crews will be trained to identify and avoid the flagged areas a best as possible.
- K. Bats:** To avoid and minimize potential impacts to listed bats, tree removal will be limited to the periods between October 1 to April 15 each year of the permit term; the cave onsite will be protected with support structures and its entrance will be kept free of debris that could block bat ingress and egress and project contractors working on the rock ledge will be trained to identify roosting bats.

#### Mitigation

- L. Plants:** To mitigate impacts to listed plants, seeds from Drummond's rock-cress and bronze sedge were collected in August 2019. The Permittee proposes germinating and propagating the seeds off-site under controlled conditions for planting-out at a mitigation site owned by the Permittee 1,000-feet south of the project area. The Permittee will also provide seeds to Native Plant Trust for storage and germination.
- M. Bats:** No mitigation actions are proposed.

#### Advice of the Endangered Species Committee

- N.** On 9/30/2019, the Secretary received the advice of the Endangered Species Committee. That advice has been considered and incorporated, in large part, into this permit.

### 9. Statutory Determination

- A.** 10 V.S.A. § 5408(a) provides: "[A]fter obtaining the advice of the Endangered Species Committee, the Secretary may permit, under such terms and conditions as the Secretary may prescribe by rule any act otherwise prohibited by this chapter if done for any of the following purposes: incidental take; scientific purposes; to enhance the propagation or survival of a species; zoological exhibition, educational purposes; special purposes consistent with the purposes of the federal Endangered Species Act."
- B.** The Permittee requests an Endangered & Threatened Species Takings Permit for incidental take.
- C.** The state of Vermont recognizes the value which plants, fish and wildlife in their natural environment have for public enjoyment, ecological balance, and scientific study. See 1981, No. 188 (Adj. Sess.), § 1(a).
- D.** The state of Vermont recognizes the need for protection and preservation of these plants, fish and wildlife in their natural environment. *Id.*
- E.** The General Assembly of Vermont intends that the species of wildlife and wild plants normally occurring within this state which may be found to be threatened or endangered within the state should be accorded protection as necessary to maintain and enhance their numbers. *Id.* at § 1(b).
- F.** The General Assembly of Vermont intends that the state should assist in the protection of species of wildlife and wild plants which are determined to be threatened or endangered elsewhere pursuant to the federal Endangered Species Act. *Id.*
- G.** 10 V.S.A. § 5408(b) authorizes the Secretary to permit the taking of a listed species if
- i. the taking is necessary to conduct an otherwise lawful activity;
  - ii. the taking is attendant or secondary to, and not the purpose of, the lawful activity;
  - iii. the impact of the permitted incidental take is minimized; and,
  - iv. the incidental take will not impair the conservation or recovery of any threatened or endangered species.
- H.** 10 V.S.A. § 5408(i)(2) allows the Secretary to require mitigation strategies and mitigation funds, in addition to

the permit fees, to mitigate the impacts of a taking or the destruction of or adverse impact on critical habitat. Mitigation may include compensation, including payment into the Threatened and Endangered Species Fund, provided that any payment is commensurate with the taking or adverse impact proposed.

- I. Pursuant to 10 V.S.A. § 5408(a), the ANR Secretary hereby determines, based upon the findings detailed above and after receiving advice from the Endangered Species Committee, that the proposed activity is consistent the purposes of the 10 V.S.A. ch. 123. An Endangered and Threatened Species Takings Permit is authorized, as conditioned below.

#### 10. General Conditions & Authorizations

- A. This permit is issued in accordance with 10 V.S.A. ch. 123. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.
- B. This permit is expressly conditioned upon compliance with all applicable federal and state laws, regulations and permits.
- C. This permit does not confer upon the Permittee the authority to conduct research without the acquiring necessary landowner permission including, but not limited to, state lands.
- D. By acceptance of this permit, the Permittee and its heirs, successors and assigns agree to provide the Agency of Natural Resources with unrestricted access, at reasonable times to the animal or plant specimens and/or animal or plant parts collected and possessed under this permit, collection and monitoring records, and access to the premises as necessary to ensure compliance with this permit.
- E. The Agency maintains continuing jurisdiction over this activity, and may, at any time, order the Permittee to undertake remedial measures if necessary, to ensure the protection and conservation of listed species.
- F. This permit is not valid for endangered and threatened species that are not listed in section 5.
- G. The permit is valid for use by the named Permittee and subpermittees(s) only and may be revoked by the Secretary at any time for cause, or violations of any terms or conditions of this permit or state law.
- H. The Permittee and subpermittees shall carry copies of this permit whenever performing authorized activities and shall make the permit available upon request.
- I. Pursuant 10 V.S.A. § 5410, the locations of listed species shall be kept confidential and the sharing of such information is a violation of this permit and the law.

#### 11. Specific Conditions & Authorizations

- A. **Consultation:** The Permittee and Permittee's contractors and consultants shall contact the VFWD Bat biologist and/or Botanist throughout the project as needed to consult on project methods and protocols.

**Bats:** Alyssa Bennett (802-353-4818, [alysa.bennett@vermont.gov](mailto:alysa.bennett@vermont.gov))

**Plants:** Bob Popp (802-371-7582, [bob.popp@vermont.gov](mailto:bob.popp@vermont.gov)).

#### Bat Protection Measures

- B. **Cave:** To protect the cave and limit the potential disturbance of bats using the cave, the Permittee shall:
  - i. Install a protective structure over the cave entrance that allows bats and air to move freely through the opening, but prevents rocks and debris scaled from the ledges above from falling into or blocking off the entrance, before work commences within 75-feet of the cave entrance.
  - ii. To the extent feasible, prioritize completing ledge work above the cave before 11/1/2019.
  - iii. Remove rock fall and other debris that blocks access to the cave opening daily.
  - iv. Contact the VFWD Bat Biologist as soon as possible if bats are observed using the cave.
  - v. Remove the protective structure once ledge work is completed in the area above the cave.
- C. The Permittee shall ensure that contractors are properly trained so that they can identify roosting bats while

removing rock from the ledge and performing other project-related tasks.

- D. Tree Removal:** The Permittee shall, to the extent practical, adhere to the following cutting schedule:
- i. Cut all trees necessary for project completion between 10/1/2019 and 4/15/2020.
  - ii. Any tree removal on the southern ledge face between station 4891+50 and station 4893+00 shall be completed between 10/1/2019 and 10/31/2019 or between 8/1/2020 and 10/31/2020.
  - iii. No trees larger than 3-inches in diameter (DBH) shall be cut above the ledge crest between 4/15-9/30/2020 unless a qualified biologist to conducts a suitable habitat assessment and authorization is granted by the VTrans Biologist.
- E.** Rock work shall be suspended whenever bats are observed within, or exiting from, the immediate area of rock/ledge targeted for removal. Contractors may relocate to a different location where falling material will not impact the site from which bats were observed. The contractor/Resident Engineer shall contact the VTrans biologist and/or the VFWD Bat Biologist as soon as possible to determine how and when to proceed with work in immediate area of bat activity.
- F.** If bats are observed on or exiting from, the general project area, but not within or from a location that is currently being worked on; work can continue uninterrupted provided that the immediate area from which bats were observed is avoided. The contractor/Resident Engineer shall contact the VTrans biologist and/or the VFWD Bat Biologist as soon as possible to determine how and when to proceed with work in immediate area of bat activity.

#### **Plant Protection Measures**

- G.** The Permittee shall flag all populations of rare, threatened and endangered plants within the project area prior to project commencement. Where feasible, plants that are not directly on or under rock targeted for removal shall be fenced-off to protect them from trampling and staging.
- H.** The Permittee shall ensure that contractors are properly trained so that they can identify, avoid and/or minimize impacts to the flagged plants.
- I. Mitigation Planting:** To ensure that the seed collected from the plants covered by this permit have the best chance of survival, the Permittee shall have qualified botany contractors:
- i. Process, store, stratify and germinate the collected seeds of Drummond's Rock-cress, Bronze Sedge and Fernald's sedge following the guidelines for each species developed by the Native Plant Trust (NPT) at an appropriate NPT facility.
  - ii. Ensure that any excess seed, but at least 20% of the seed from each subpopulation is reserved by the NPT for cold storage seed banking in case the initial out-planting fails.
  - iii. Remove/treat any non-native invasive species found within 30-feet of the receiving site prior to the planting of seedlings. If herbicide is deemed necessary, application shall be performed by a licensed applicator.
  - iv. Transplant seedlings to the receiving site once they reach an appropriate size, based on NPT professional judgement.
  - v. Water out-planted seedlings weekly throughout the first growing season, except during weeks when 0.5-inch or more precipitation has fallen.
  - vi. Monitor plants for five-years following transplantation to assess survivorship and to control non-native invasive plants within 30-feet of the transplants.

#### **12. Reporting Requirements**

- A.** Any mortality/morbidity related to the activities authorized under this permit that was/were not specifically requested, anticipated and/or authorized shall be reported in writing to VFWD Permits Specialist within 72 hours of each occurrence. Reports shall include species identification, date, and reason for death, along with a plan for reducing the likelihood of future occurrences. All morbid specimens shall be stored frozen until transferred to a VFWD biologist.
- B.** All observations of bats in the project area shall be reported to the VFWD Bat Biologist within 48-hours.

- C. Annual monitoring reports on transplanted plants describing survivorship and presence/status of non-native invasive species shall be submitted along with a site map showing plant locations to the VFWD Botanist yearly by December 1st.
- D. The Permittee shall accommodate requests by Agency of Natural Resources staff for additional information from collection activities (e.g., copies of original field sheets, computerized data in usable format). Reports of results of any subsequent analyses and copies of subsequent publications resulting from the collections made under this permit shall be forwarded to the Vermont Fish & Wildlife Department within 30 days of publication.

Issued by: \_\_\_\_\_

Louis Porter, Commissioner  
Fish & Wildlife Department

Date: \_\_\_\_\_

Sept 30 19

**Right to Appeal to Environmental Court**

Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available online at [www.vermontjudiciary.org](http://www.vermontjudiciary.org). The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660).