State of New Mexico Energy, Minerals and Natural Resources Department

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Scientific Study and Collection Permit Application

The State Forester may issue permits to take specimens, or parts thereof, for the purpose of conducting scientific studies that enhance understanding of the distribution of an endangered plant species, or will generate new knowledge in the genetic, anatomical, chemical, morphological, life history, or in other relevant areas of research enhancing the understanding of the conditions required for survival of an endangered plant species. The State Forester may deny applications for Scientific Study Permits in locations where endangered plant survival is especially precarious. Each person applying for a Scientific Study Permit must demonstrate sufficient expertise to carry out the permitted activities in a competent manner. The following information may be used to support the request for a permit: education in botany or related area, field experience, collection numbers, accessions into a recognized herbarium, publications, and recommendations from recognized authorities.

When a permittee takes specimens, or parts thereof, pursuant to a Scientific Study Permit, the permittee must deposit at least one voucher specimen at either the University of New Mexico Herbarium or New Mexico State University Herbarium. When possible, the permittee shall take specimens or materials in such a way as to not reduce or impact the population (e.g., take a single stem from an herbaceous perennial, leaving the root intact, or other methods appropriate to the particular species).

Seed and tissue samples may also be collected under this permit for the purpose of ex situ conservation, in-vitro propagation analysis, seed germination ecology, or long-term storage or preservation efforts that support species survival and understanding. No more than 10% of available seed shall be collected, while ensuring that seeds are sampled representatively across populations (i.e., capturing as much genetic diversity across populations). In extremely small populations, discretion should be taken in collecting only enough material needed for analysis, such that it will not impact the species' reproduction efforts further. When a permit is issued to an applicant, it shall extend to those working under the permitee's direction for the cleaning, storing and analysis of seeds.

A Scientific Study Permit does not extend to the permittee the privilege to trespass or enter on lands without the owner's permission. The permittee should contact the appropriate management agency or landowner before the project is to commence to obtain permission.

A Scientific Study Permit does not give the permittee authority to take federally threatened or endangered plants. Taking of these species also requires a federal permit issued by the United States Department of the Interior, Fish and Wildlife Service.

Permit Application

An application for a permit for scientific study must include the following:

- 1) name, street address, phone number, and email address of primary researcher;
- 2) affiliation of the applicant with a recognized organization, agency, academic, or research institution;
- 3) endangered species proposed for study;
- 4) objectives of the study;
- 5) reason for the study and the anticipated benefits;
- 6) research methodology
 - number of specimens to be taken, per species, if more than one;
 - what kinds of material are needed (e.g., floral tissue, seeds, etc.)
 - how specimens or material will be taken;
 - location and date of where/when specimens or material will be taken;
 - methodology, including how the specimens will be used;
 - location of final specimens/vouchers or material, such as seeds;
- 7) whether a federal permit will be needed;
- 8) qualifications of the applicant, including any past work with relevant species, education in botany or related area, field experience, collection numbers, accessions into a recognized herbarium, publications, and recommendations from recognized authorities.

Additionally, if seeds or other materials will be collected:

- 1) what is the purpose/need (e.g., seed banking, genetic analysis, etc.);
- 2) where and how will seeds or other materials be collected;
- 3) where will the material be processed (cleaned) and stored long-term;
- 4) Any seed or other materials collected should follow **Center for Plant Conservation** 'best practices' guidelines for cleaning and storage and ensure at a minimum:
 - place of origin is documented
 - · maternal lines differentiated
 - curated to test for long-term storage and viability;
- 5) documentation that storage needs of the target species are understood prior to collection; and,
- 6) outline of practices that will be followed in seed or other materials collected (e.g., only enough material is taken so that long term survival of the species is not impacted in the wild, especially at small population sizes).

Final Report and Requirements of Permit

Permits require submission of a final report that includes results of any genetic testing, numbers and locations of specimens or material taken, and if seeds were obtained, where they were processed, analyzed, and/or stored, methodology used, etc. Failure to submit a report may result in the denial of future permit requests.

To assist in the identification and preservation of endangered plant species in New Mexico, permittees shall also report all collections of voucher specimens, if collected, to the state botanist by December 31 of each year and include the voucher specimen's label information and the place or places where specimens were deposited. See below.

Specimen Location

If voucher specimens are collected, the label affixed to each specimen shall contain detailed information on collection location (e.g., latitude/longitude), description of the habitat, associated species, collector's name, date of collection, and estimated size of the population. See specific herbaria websites for more information on label requirements.

Any voucher specimens collected must have at least one deposited at the University of New Mexico Museum of Southwestern Biology or New Mexico State University Las Cruces.

Criteria for Reviewing Permit Application

- 1) The application demonstrates the scientific study will enhance understanding of the distribution of the endangered plant species, or will generate new knowledge in the genetic, anatomical, chemical, morphological, life history, or in other relevant areas of research enhancing the understanding of the conditions required for survival of the endangered plant species.
- 2) The endangered plant is not in locations where endangered plant survival is especially precarious.
- 3) The application demonstrates that the applicant has sufficient expertise to carry out the proposed activities in a competent manner.

An application for a permit may be denied if an applicant a) has taken an endangered plant outside the scope of a prior permit's provisions or without a permit, b) otherwise failed to comply with a prior permit, c) provided false information on a permit application, d) attempted to transfer a prior permit without the State Forester's written approval or allow someone else to use a prior permit, or e) does not meet the requirements for a Scientific Study Permit.

Submitting Permit Application and Final Reports

Electronically send to: rareplantpermits@emnrd.nm.gov

Or

By mail:

Energy, Minerals and Natural Resources Department Forestry Division Attn: Erika Rowe 1220 S. St. Francis Drive Santa Fe, NM 87505