

Rocky Mountain Herbarium Use Policies

The Use Policies of the Rocky Mountain Herbarium pertain to the three herbaria administered by the Rocky Mountain Herbarium: The Rocky Mountain Herbarium (RM), the US Forest Service National Herbarium (USFS), and the Solheim Mycological Herbarium (RMS). For the purposes of this document, the term "Rocky Mountain Herbarium" and the acronym "RM" refer to all three herbaria, unless explicitly stated otherwise.

Access Policy

The Rocky Mountain Herbarium (RM) is located on the third floor of the Aven Nelson Building, University of Wyoming campus. It is open 8-4:30, Monday-Friday, except during University closures. There are no public displays at the Herbarium. Persons wishing to access the specimens for research should contact the Curator before planning a visit, so that we may assist you.

Loan Policy

The Rocky Mountain Herbarium will loan specimens to qualified institutions for scholarly research. Individuals wishing to borrow specimens must partner with an appropriate institution. The borrowing institution must meet minimum standards for security, storage environment, and handling of specimens, and assumes all responsibility for the specimens. Students must request loans through their faculty supervisor. Delinquent loans may delay the processing of new requests and/or prevent future loan requests by the individual borrower or affiliated institution.

Loans are made for one year. Extension of the loan period may be granted upon written request to the Curator. No portion of the specimens on herbarium sheets may be removed ("destructive sampling") without prior approval of the Curator. Returned loans should be packed carefully and sent via insured and tracked mail service. We reserve the right to request the return of loaned material at any time.

Type material, endangered taxa, specimens judged by the RM Curator to be exceedingly fragile, or those which are represented by fewer than five specimens in the RM are generally not considered for loans. One specimen per taxon is retained by the RM at all times. However, images may be available through the RM database search, and researchers are encouraged to visit the RM website to view these specimens or visit the RM in person. Loans of individual specimens, no matter the total number of specimens for that taxon, will be made on a case-by-case basis.

Requests for permission to perform destructive sampling of RM specimens (e.g., dissections, pollen or seed removal, removal of tissues for DNA extraction, etc.) are not granted routinely but are decided on a case-by-case basis (see Destructive/Invasive Sampling Policy).

Loan requests may be submitted in writing or via email and addressed to the Herbarium. Loan requests should include the following information:

- Full name of requestor (and sponsor, if applicable), institutional affiliation, institutional mailing address, email, and phone number.
- Complete taxonomic information, including relevant synonymy, or for individual specimens, collector name and collection number.

- Proposed activities to be conducted using the specimens.
- Justification of the need of the specimens for the proposed study.
- Experience of the researcher in handling natural history specimens.
- Summary of previous work on the taxonomic group.

Annotations

When used in taxonomic research, specimens must be annotated, even when agreeing with previous determination. An annotation label with an updated identification, researcher's name, and date of annotation should be affixed to the specimen prior to return.

Terms of Use of the Database

The data and images provided by the RM database search may be used freely by individuals and organizations for purposes of basic research, education and conservation. These data and images may not be used for commercial or for-profit purposes without the express written consent of the Rocky Mountain Herbarium, and may not be repackaged, resold, or redistributed in any form.

Image policy

The Image Reproduction Policy of the Rocky Mountain Herbarium pertains to original RM photography of herbarium specimens, analog or digital, and derivative images made from existing transparencies, negatives, prints, and electronic media in the Rocky Mountain Herbarium. Reproduction, display, or distribution of RM images, whole or in part, is prohibited without explicit written permission from RM.

With permission, photographs (analog, digital, and video formats) and scanned archive materials may be used, downloaded, reproduced, displayed, distributed, posted, or reprinted by persons affiliated with academic and/or non-profit organizations, for scholarly purposes only. In all cases of publication and public presentation, "With permission of the Rocky Mountain Herbarium" must be cited, with reference to institutional acronym and accession number when a specific specimen is indicated (e.g. RM 123456). In the case of online images, the barcode and persistent URL should be cited.

Acknowledging the Herbarium

Use of RM specimens, data, or images in publications, dissertations and theses, or other scientific reports, should be accompanied by an acknowledgement of the Rocky Mountain Herbarium as the source for the information. The RM expects to receive notification of all publications resulting from work with RM specimens, the RM database, and RM images. This helps us to document the use of specimens in the literature, and helps us to justify continued funding for the collections so that these resources remain available into the future.

RM Specimen Donation policy

The Rocky Mountain Herbarium will consider donations based on their scientific or historical merit. For example, vouchers for scientific research, legacy collections from institutions of higher education, or personal collections of professional or amateur botanists will be considered for inclusion in the RM. Specimens must include adequate data and be of research quality. All potential donations will be

evaluated on a case-by-case basis. Contact the Curator before making a donation. Any valuation of individual donated specimens, or larger collections, if desired, is the responsibility of the Donor.

RM Specimen Exchange Policy

The Rocky Mountain Herbarium will enter into specimen exchange agreements with other recognized herbaria. Please contact the RM Curator for additional information.

Destructive/Invasive Sampling Policy & Authorization Form

The policy detailed below is intended to help the Rocky Mountain Herbarium (RM) balance the preservation and integrity of herbarium specimens with their utilization for scientific research. Decisions concerning destructive sampling of collections will be made on a case-by-case basis. The investigator requesting destructive sampling should have experience with laboratory techniques to ensure a reasonable probability of research success. We expect the investigator to have made diligent efforts to sample material from non-herbarium resources prior to making this request. Requests for removal of samples from herbarium specimens should be addressed to the Curator via email or mail. Please read this policy statement, complete the agreement form outlined below, and attach it to your specimen request.

As a rule, no material may be removed from specimens without prior consent of the Curator of the Herbarium. Permission for removal of material, when given, is contingent upon adherence to the following guidelines:

1. It is intended that all destructive sampling is conducted for purposes of eventual preparation of a scientific manuscript. Please notify staff if this is not the case.
2. Leaf material, pollen, spores, fungal tissue, bryophyte fragments, etc. may be removed from specimens only when there is adequate material available. Care must be taken not to damage the scientific value of the specimen. Whenever possible, material from fragment packets on the herbarium sheet should be sampled. Specimens should be properly stored during such study.
3. Pollen should be removed from no more than one flower per sheet, and the sheet must have more than three flowers except where permission is otherwise granted. The whole flower should not be damaged or removed.
4. Material may not be removed from type collections, from historical specimens, or from taxa represented in the herbarium by fewer than five collections, except in rare instances, and then only following approval by a designated staff member.
5. Material may not be removed from a herbarium sheet for a second time, if the nature of the study is the same (e.g., pollen material for SEM, leaf material for DNA analysis).
6. For anatomical and morphological studies, the researcher must return to the RM either a duplicate high-resolution micrograph or an SEM photograph as well as the magnification. The photo should be

labeled with the name of the taxon, the collector's name and number, and the country of origin of the voucher sheet from which the sample was obtained.

7. For molecular studies, sampling requests should indicate the amount of material needed, and in general should never exceed 1 cm². Specimens must be annotated with the identification for the specimen accepted by the researcher. DNA sequence(s) derived from the specimen must be deposited into GenBank or EMBL within three years of the date of sampling. DNA obtained from RM specimens should be properly stored and curated in a permanent storage facility.

8. For large or complicated requests of material for DNA extractions or other studies, researchers will be encouraged to visit RM to select specimens for sampling. Removal of material from specimens selected by the researcher will be made with supervision and approval by appropriate staff. Not only does a personal visit reduce the work required of the Herbarium staff, it allows the investigator to make more precise selections based on specimen age, material in packets, etc.

9. Each specimen sampled must be annotated, indicating the nature of the study, type of material removed, the researcher's name and institutional affiliation, and date of removal. Labels should not exceed ~ 6 x 2 cm in size.

10. All policies related to RM specimens, as stated in the Rocky Mountain Herbarium Use Policies, apply to specimens used for destructive sampling.

If you need to conduct destructive sampling of RM specimens, and agree to sample materials under the above conditions, please complete and sign the form below, and include it with your sampling request to the Curator, Rocky Mountain Herbarium University of Wyoming, Department of Botany 3165, 1000 E. University Ave., Laramie, WY 82071, U.S.A. or email to bnelsonn@uwyo.edu.

Rocky Mountain Herbarium - Destructive Sampling Request

I have read the Destructive/Invasive Sampling Policy of the Rocky Mountain Herbarium and promise to abide by the policy.

Research Investigator:

Printed Name: _____

Signature: _____

Date: _____

Printed Name and address of the Institution:

Major Professor (if the Research Investigator is a graduate student):

Major Professor Printed Name: _____

Signature of major Professor: _____

Date: _____

Person institutionally responsible for the loan if different from above: _____

Upon receipt and review of your request, we will contact you concerning the RM's decision with regards to the request for destructive sampling.