

Plant Conservation Guidelines: Scientists and Teachers

The Plant Conservation Roundtable's Conservation Guidelines are intended to apply to the collection of United States native plants for use as herbarium specimens, as research material for biochemical assay or anatomical study, for teaching or for experimental horticulture.

Please consider the following when collecting native plants for the purposes mentioned:

1. Know which taxa are locally or nationally rare or protected. Find out and follow all necessary legal procedures for collecting. Contact the state's natural resource agency [in Virginia, the Department of Conservation and Recreation, Division of Natural Heritage, www.dcr.virginia.gov/dnh/nhrinfo] and the Division of Endangered Species, USFWS, www.fws.gov/endangered.
2. Obtain needed permits for scientific collecting on public lands. On private lands, obtain the permission of the landowner before collecting. Report any illegal collecting that you encounter to the appropriate authorities.
3. Do not collect indiscriminately, even in large populations. Collect only the minimum amount of plant material necessary for documentation or research purposes. When feasible, use photography or other methods of documentation. When collecting, take into account the cumulative effect of all collecting at the site.
4. Avoid collecting from a population of fewer than 100 plants. When essential to verify a possible new record for the area, or to obtain a scientific voucher, collect only a single specimen. Do not collect whole plants when plant parts are sufficient. Do not collect samples so large as to affect adversely the population's reproduction and survival. For voucher specimens, take only a small part if this would be adequate for positive identification. Never collect the only plant at a site.
5. If you encounter a plant with which you are unfamiliar, assume it is rare and exercise one of the following options. Small population, possible to return: photograph the plant for identification and return for collecting only if the collection would add significantly to scientific knowledge. Small population, difficult to return: collect at most a single specimen. Large population: follow these guidelines.
6. When collecting multiple specimens for exchange with other herbaria or for population studies or other purposes, make sure there is a clear need for the number of specimens you wish to collect. Be sure the plant is abundant enough to justify the collection of multiple specimens. Collect population samples only as part of a scientifically designed sampling plan for a specific scientific purpose. Collect no more than 5 percent of the plants visible in any population.
7. Collect discreetly so as not to encourage others to collect

indiscriminately. Be prepared to explain what you are doing and why. Avoid unnecessary damage to the site and its aesthetic values.

8. If you discover a new plant record, notify an appropriate conservation official or land manager. Be cautious in providing site locations of rare plants to others.

9. If you learn that rare or protected taxa or their habitats may be destroyed, notify your state conservation agency [in Virginia, Virginia Natural Heritage Program, 217 Governor St., Richmond VA 23219 or 804 786-7951] or The Nature Conservancy [through the Virginia Chapter, www.nature.org or 434 295-6106].

10. Conduct salvage (rescue) projects only in sites that are scheduled for imminent destruction and only in conjunction with appropriate state agencies or conservation organizations. Obtain prior permission of the landowner. Do not collect from portions of the site that will remain in a natural state. Use salvaged plants only for such purposes as relocation, public education, botanical research or documentation, or as propagation stock, and not for sale to the public.

11. Care properly for the specimens you collect. Deposit herbarium specimens in an appropriate, recognized, publicly accessible collection. Follow standard methods such as the guidelines issued by the Natural Science Collections Alliance (www.nscalliance.org) for labeling the specimens.

12. If you plan to maintain living plants, collect in a manner to ensure the survival of the individual plants.

13. Do not purchase wild-collected plants (or plant parts) of rare or protected taxa even for research, teaching or herbarium specimens.

14. When choosing live plant material to use for scientific research, if possible use plants or plant parts from existing collections or from propagated sources. If you must collect living plants from the wild for scientific research, collect in a manner least likely to damage the wild population. In order of general preference, collect (1) seeds (if abundant), (2) cuttings or other plant parts, (3) whole plants. Leave behind some reproductive or regenerative parts such as fruits, roots, or rhizomes.

15. When discussing your research results, describe conservation considerations underlying your collecting techniques.

16. Teach your students about proper and careful collecting. When taking students into the field, visit only non-sensitive areas, taking care not to trample the site. Avoid frequent visits to the same natural site. For classroom use, collect only those plants both common in the region and locally abundant at the site. Generally, collect only the portions of a plant necessary for identification, such as leaves, flowers, or fruit.

--Developed by The Plant Conservation Roundtable, Washington, D.C. Adopted June 13, 1986.

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Note: The guidelines above have been changed only to update the contact information in items 1, 9, and 11, and, in brackets, add information specific to Virginia.