



LIVING COLLECTIONS POLICY

U.S. NATIONAL ARBORETUM

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

APRIL 25, 2012

The U.S. National Arboretum (USNA) is a U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) public garden and research facility. We are dedicated to serving the public and improving our environment through educational programs, display gardens, germplasm conservation, and scientific research to develop new plants and technologies. The USNA is a unique federal center linked by partnerships to other governmental agencies, the scientific community, other public gardens, and various private sector groups. The USNA is a national resource for plant conservation, display, and education that welcomes visitors and researchers in a stimulating and aesthetically pleasing environment.

PURPOSE OF THE LIVING COLLECTIONS

The Living Collections of the USNA conserve plants and encourage their use for research, discovery, and education. The Living Collections also serve as an integral part of the collective botanical heritage of the public garden community. As a unique component of the USDA ARS National Plant Germplasm System (NPGS), the Living Collections are an international source of ornamental plant genetic resources.

COLLECTIONS POLICY INTENT

In accordance with the USNA Strategic Plan, this Living Collections Policy serves to guide the development and management of the gardens and collections and to provide guidance on the acquisition and deaccessioning of plants. It is a key tool in the implementation of the provisions of the USNA Strategic Plan that may be used as a framework to evaluate the alignment of the Living Collections with future research and education efforts, gifts, and endowments.

SCOPE OF THE LIVING COLLECTIONS

The Living Collections of the USNA encompass all living plants of the USNA that are catalogued in the USNA database from research, germplasm, and display collections located in Washington, DC, Beltsville, MD, and McMinnville, TN. These accessions may also be catalogued in the NPGS Germplasm Resource Information Network.

Although this collections policy applies only to plants that have been accessioned or are located within gardens or collections, it is noted that woodlands, meadows, and natural areas are an important part of the USNA and that the USNA is committed to maintenance and protection of these areas.

The Living Collections fall into one or more of three categories: Research Collections, Germplasm Collections, and Display Collections. These designations are not exclusive and many accessions fall within more than one category.

RESEARCH COLLECTIONS

Research Collections consist of accessioned plants within active research projects. During the course of research, plants may be collected, characterized, bred, or evaluated under individual research programs and may not warrant accessioning into the USNA database. Plants, including wild collections, cultivated varieties, and breeding selections that are deemed valuable are accessioned as necessary. Upon the completion of research projects, the Research Collection is evaluated to determine if accessions should be incorporated into Germplasm or Display Collections. Any plants introduced as the result of USNA research or other accessions with the highest quality passport data will be given priority for incorporation into the appropriate collection.

GERMPLASM COLLECTIONS

Germplasm Collections function to preserve a representative sample of the genetic diversity within a given taxon or geographical region. Collections will consist of wild-collected plants and cultivars obtained from originators and plants that exhibit horticultural traits deemed to be valuable to the nursery industry. Plants obtained from locations where pressures on wild flora may make future collection unlikely are the highest priority with respect to development of Germplasm Collections. North American Plant Collections Consortium (NAPCC) collections are maintained and developed to maximize the full range of germplasm that can be grown in USNA conditions and to complement the collections of peer institutions. Collections that are part of the National Plant Germplasm System are maintained to the curatorial standards set forth in the *Manual of Procedures for the National Plant Germplasm System*.

DISPLAY COLLECTIONS

Display Collections facilitate the interpretation of the art and science of horticulture to visitors and also serve to inspire and inform the gardening public. Plants are maintained for historical purposes, possess outstanding horticultural qualities, or might be particularly well-suited to the climate of the Mid-Atlantic Region. Priority is given to plants that are of great age or that cannot be easily replaced. Priority is also given to cultivars released from the USNA. In other instances, when a display is intended to be temporary, plants may be accessioned if they are to be incorporated into other Display, Research, or Germplasm Collections.

PLANT COLLECTIONS COMMITTEE

The Plant Collections Committee will provide oversight of the Living Collections to ensure alignment with research, educational, and display priorities and the USNA Strategic Plan.

The Plant Collections Committee, comprised of the Gardens Unit Leader, Plant Records Horticulturist, designated Woody Landscape Germplasm Repository staff member, and four other members to be named by the Director of the USNA will meet at least twice a year to develop recommendations for plant acquisition and deaccessioning. Their work and oversight will ensure effective and comprehensive integration of the acquisition, placement, management, and use of the USNA Living Collections. The Plant Collections Committee will also oversee the biennial review of collection inventories, and will coordinate plant exploration activities of the USNA.

The addition or removal of any garden or collection will involve review by the Plant Collections Committee and the Director of the USNA and will only be undertaken after diligent consideration of the impact on other gardens, collections, and programs of the USNA and its stakeholders, and careful analysis of whether such change is consistent with the USNA's mission and strategic plan.

LEGAL AND ETHICAL CONSIDERATIONS

Acquisitions and distributions will comply with all relevant local, state, federal, and international laws regarding access and use of plant genetic resources including USDA Animal and Plant Health Inspection Service (APHIS) regulations, the Convention on International Trade in Endangered Species (CITES), the Convention of Biological Diversity (CBD), the Nagoya Protocol, and the NPGS acquisition and distribution guidelines. Plants that pose a threat to the environment due to their invasive potential will either not be incorporated into the collections, or if deemed necessary for research or educational purposes, will be closely monitored and managed with appropriate precautionary steps taken to avoid their escape. The USNA will make best efforts to use sustainable horticultural practices to support the health and vitality of its plant collections.

Acquisitions obtained outside the contiguous 48 states of the U.S. must be collected with prior informed consent from the appropriate national authority and must be shipped directly to APHIS with country of origin, phytosanitary permit, and a detailed packing list with family, genus, and species. It is the responsibility of the individual acquiring plants to research current national access laws and quarantines governing the collection, movement, and distribution of plants within and outside the U.S.

PLANT DOCUMENTATION

The USNA is a public garden and research facility with extensive plant collections, the scientific value of which is only as strong as their documentation. The USNA is committed to maintaining accurate and complete documentation of its Living Collections in a comprehensive and integrated system. Procedures for accessioning, deaccessioning, removal, distribution, labeling, and mapping are outlined in the *Plant Records Manual*. Plant documentation procedures for National Plant Germplasm System collections are outlined in the *Manual of Procedures for the National Plant Germplasm System*. In addition to accession and distribution information, a record will be kept of the use of all accessioned plants, either by in-house staff or outside stakeholders, including use for breeding, environmental studies, distribution, taxonomic work, or other purposes. Plants growing naturally in woodlands or other areas outside gardens and collections are accessioned as needed.

GIFTS AND LOANS

Plant donations may be accepted under authority granted by Congress that allows the USNA to accept gifts and donations. Such gifts are to be accepted by the Director of the National Arboretum, and should comply with the guidelines set forth by this collections policy. Further explanation of policies regarding gifts can be found in *Guidelines for the Solicitation, Acceptance, and Acknowledgement of Donations to the U.S. National Arboretum*. Loans of plants for the purpose of temporary display are allowed provided the plants are accompanied by a completed Property Pass (Form AD 873 or Form OF 7). Plants may be borrowed for a finite period for research, educational, or display purposes, provided that a Temporary Loan Receipt or a Revocable Permit is completed to document the loan and its terms.

DISTRIBUTION

All plants and propagules that are to be distributed to points outside the District of Columbia or state in which they are held in USNA inventories must bear a phytosanitary or nursery inspection certificate. Distributions of some plants may require a Materials Transfer Agreement (MTA). All distribution documents, which shall consist minimally of a shipping invoice and a phytosanitary certificate, shall be submitted to the Plant Records Horticulturist for entry into the USNA database. All distribution records for plants listed in the Germplasm Resources Information Network (GRIN) database shall be maintained in the GRIN database. All requests for plant material are to be referred to the Plant Records Office. The Plant Records Horticulturist, in consultation with USNA staff, will determine if the material is available for distribution. Only small quantities are distributed; requests for larger quantities may be granted on a case by case basis. Only USNA staff responsible for the care of the Living Collections are permitted to collect propagules.

Requests will be honored if the following criteria are met:

1. The plant is in good health and would not be compromised by the collection of propagules.
2. The plant is not considered to be an invasive plant or have significant invasive potential in the region of destination.
3. The delivery of the propagules is requested at a time of year conducive to the successful propagation of the plant requested.
4. The plant is not available commercially from nurseries, propagators, or any mail order or Internet vendor.
5. The plant can be distributed according to parameters under which it was acquired or collected, including local, federal, and international regulations governing its propagation, distribution and use.

LABELING, VOUCHERS, AND INVENTORY

All accessioned plants in display gardens shall bear a record label with complete plant name and accession number.

USNA taxonomists will determine which accessions should be vouchered as herbarium specimens, and will work with the staff responsible for the Living Collections to schedule the collection of vouchers.

Horticulturists and researchers are responsible for maintaining inventories of all material under their care. Inventories must be regularly updated, with inventory, field checking, and update of the Plant Records database. Updates will occur a minimum of once every five years. The Plant Records Horticulturist shall prepare all pre-inventory documents, assist with inventory updates, and provide database training to staff. Germplasm inventories, including primarily wild-collected or original-sourced material, will also be maintained in the Germplasm Resources Information Network (GRIN).

DEACCESSION AND REMOVAL

To improve the quality of the Living Collections, it is sometimes necessary to remove some accessions from holdings. Deaccessioning occurs when the identity or trueness-to-type of an accession is doubtful, the plant is in decline or has been damaged, concerns about invasive potential arise, or a general loss of functionality for display or research purposes has occurred. The process of deaccession and removal of unwanted plants requires several steps which can take a year or more to complete. The Plant Records Horticulturist must be notified prior to deaccession of any plant. Removal of the plant will be postponed if a herbarium voucher must be collected or the plant must be propagated prior to removal. If the plant to be deaccessioned is not commercially available, every attempt will be made to offer propagules of deaccessioned plants to other public gardens and research entities that are likely to be interested in them prior to their removal. Following the completion of the deaccession process, removal shall be accomplished in a timely manner, no more than one year after deaccession.

LIVING COLLECTIONS POLICY REVIEW

Review of the Living Collections Policy shall occur at least every five years. The Director of the USNA will make the final approval of any modifications of the Collections Policy resulting from such review.

AUTHORIZED BY: 
Colien Hefferan, Director, U.S. National Arboretum

April 2012 Version. Revision due April 2017.

GLOSSARY

Accession

A plant or group of like plants that is distinct from other plants in its identity due to its botanical identity, locality in which it was collected, or morphological difference from other plants. Accessions are given a unique sequential number and this number is used to track all data associated with that plant. Materials are generally accessioned at the time they are collected or purchased, regardless of whether they are in the form of seed, propagules, or plants.

Acquisition

The means by which plants are added to the Living Collections of the USNA. Plants may be acquired by collecting them in their native habitat or in areas where they are cultivated, by purchasing them, or by receiving them as gifts. Each acquisition is undertaken to satisfy a particular goal in the development of a garden or collection.

Collection

Any assemblage of accessioned plants organized by a particular theme or category. A collection may consist of plants that are growing in different areas, and any given accession may be part of more than one collection. Collections may have germplasm, research, educational, and display functions.

Deaccessioning

The act of removing a plant from the Living Collections of the USNA. Accession records are retained after deaccessioning and the plant is physically removed from the garden or collection in which it is growing.

Development

The process by which gardens and collections are enhanced and improved by addition of new plants and removal of existing plants for a variety of reasons.

Distribution

The process by which accessioned plants are shared with other entities. A permanent record is kept of the recipients to provide a means to recover the distributed plant in the event of catastrophic loss of plants at the USNA.

Garden

Any assemblage of plants organized for research, aesthetic, or educational purposes into a unified whole. A garden may have plants that are accessioned that function as part of a collection and may also have plants that are not accessioned that serve temporary display functions.

Germplasm

Seeds, plants, or plant parts that are useful in plant breeding, research, or conservation because of their genetic attributes. Germplasm is maintained for the purposes of studying, managing, or using the genetic information they possess.

Inventory

The act of checking plants in the field against computer generated listings of plants to ensure that plants in the electronic inventory are correctly labeled, alive, and in good health, with their physical location correctly noted. This term may also refer to the printed or electronic database for a particular collection.

Original-Sourced

An adjective that refers to plants or germplasm that have been acquired from the entities that originally introduced them, typically received as propagules from the plant that was originally selected or named.

Taxon

A unit of any rank within the taxonomic hierarchy (e.g., family, genus, species, variety, cultivar). Plural: **Taxa**

Voucher

A preserved dried specimen of a plant that is accompanied by information regarding its provenance, identity, and accession information. A voucher contains flowers, fruits, or fruiting structures to aid in taxonomic study.

Wild-Collected

An adjective that refers to plants or germplasm that has been collected in its native range and is known to be growing there without human assistance.