

MONTGOMERY BOTANICAL CENTER

PLANT COLLECTIONS POLICY

VERSION 3.2

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MONTGOMERY BOTANICAL CENTER'S MISSION

(Approved by the Board of Directors, November 2003)

The mission of the Montgomery Botanical Center, a non-profit institution, is to advance science, education, conservation and horticultural knowledge of tropical plants, emphasizing palms and cycads, and to exemplify excellent botanical garden design. Through this mission, Montgomery Botanical Center endeavors to make the Montgomery name known and respected throughout the world in the field of plant science.

The Montgomery Botanical Center carries out its mission by collecting seeds from wild populations of tropical plants around the world, particularly seeds of palms and cycads. Montgomery germinates these seeds in its nursery and grows the resulting plants in population-based, documented, scientific collections in its extensive garden pursuant to excellent botanical garden design. Montgomery fosters, and participates in, scientific research by collecting and maintaining scientific data on its collections, by making its collections and scientific data available to scientists for research purposes, and by disseminating this research and data through scientific publications. Montgomery cooperates with many botanical institutions and countries around the world by making its plant collections, knowledge and expertise available to their scientists, educators, and students. Montgomery explains its mission and operations to the general public through works hops, lectures, publications and tours of the plant collections in its garden.

Montgomery Botanical Center's wild-collected, population-based, documented tropical plant collections are extraordinary in their scientific, educational and conservation value; and its botanical garden that contains those collections is extraordinary in its design and beauty.

MONTGOMERY BOTANICAL CENTER'S PLANTING POLICY

(Approved by the Board of Directors, November 2000)

1. Plants must have scientific and/or educational value.
2. Plants must have a reasonable chance of growing on the property.
3. Plants must be maintained following exemplary horticultural practices.
4. Plants must be incorporated into the collection in an aesthetically pleasing landscape design.

BOARD AND STAFF ROLES ON COLLECTIONS POLICY

The MBC Board wrote and formally adopted the Mission Statement and Planting Policy included above. These two Board-level governance documents comprise the foundational guidance for the MBC Collections Policy. The MBC Board agrees that the Collections Policy is appropriate, essential and germane to MBC operations. The Board also agrees that this document, as an operational policy which directs MBC staff, is not within the scope of Board-level governance.

PLANT COLLECTIONS POLICY

Purpose

This Policy guides the development and management of the living collections at Montgomery Botanical Center (MBC) in accordance with MBC's Mission. It provides direction for the acquisition of collections, conditions for acceptance and removal of living material. It also ensures that ethical standards will be upheld in all transactions.

Policy Implementation and Review

Adherence to this Policy is the responsibility of the Living Collections Manager. MBC Collections Development Staff implement the Policy under the guidance of the Living Collections Manager.

The Policy was drafted by the Living Collections Manager and approved by the Executive Director. Periodic review of this Policy is the responsibility of the Living Collections Manager.

Collections Overview

MBC's living collections are organized as follows:

1. Grounds Collection. The Grounds Collection is composed of the Palm, Cycad, and other vascular plant collections. Emphasis is on plants of research, education, and conservation importance. Plants with detailed provenance are given priority, although all wild collected plants and plants of special interest are also valued. The Grounds Collection is maintained by the Palm, Cycad, and Dicot Curators under the supervision of the Superintendent. Records associated with the Collections are maintained by the Collections Development (CD) Department under the supervision of the Living Collections Manager.
2. Nursery Collection. The MBC Nursery staff germinates seeds and grows seedlings and plants acquired through expeditions, donations, propagation, and purchase. Plants are cultivated in the Nursery until large enough and healthy enough to be planted out into the Grounds Collection. The Nursery Collection should be limited to plants with a reasonable chance of growing on the property. Emphasis is on plants with research, education, and conservation value. The Nursery Collection is maintained by the Nursery Curator under the supervision of the Superintendent, and the CD Department maintains records associated with the Nursery under the supervision of the Living Collections Manager.
3. MBC/FNGLA Seedbank. MBC, in association with the Miami-Dade Chapter of the Florida Nursery, Growers & Landscape Association (FNGLA), operates the largest seedbank of its kind in the world. To encourage conservation through cultivation, the MBC/FNGLA Seedbank distributes seed produced from MBC's collections. Seeds are also donated to research institutions, universities, botanical gardens, and plant societies worldwide. The Seedbank operates under the supervision of the Seedbank Coordinator. The Seedbank Coordinator and CD Department, under the supervision of the Living Collections Manager, maintains all records associated with the MBC/FNGLA Seedbank.
4. Pollen Bank. MBC maintains a frozen Pollen Bank under the supervision of the Seedbank Coordinator. The primary goal of the Pollen Bank is to ensure that viable pollen is available on site for the purpose of producing artificially propagated, documented seeds for the MBC/FNGLA Seedbank, research institutions, botanical specialists, curators, and/or collectors interested in producing artificially propagated seeds. Records associated with the Pollen Bank are maintained

by the Seedbank Coordinator and CD Department, under the supervision of the Living Collections Manager.

Acquisition of Material

Montgomery Botanical Center ensures that all plant material acquired from overseas on behalf of MBC has been collected, exported, and imported in compliance with all applicable laws and regulations of the country of origin and the US Federal Government. MBC Staff will reject any plants known to have been illegally or unethically obtained in the country of origin.

Seeds or plants arriving at MBC are delivered directly to the appropriate Biologist or, in the Biologist's absence, to the Living Collections Manager. The Biologist (or Living Collections Manager) must approve receipt and initiate the processing of all incoming material. Incoming seeds or plants should be unlikely to become an invasive threat to local native habitats. For wild collected material arriving from overseas, documentation establishing proper collection and movement of plant material in accordance with all applicable laws and regulations (*e.g.*, collection/research permit, export and import permits, CITES permit(s), phytosanitary certificate, etc.) must accompany the material. Original documentation will be maintained permanently in the Montgomery Archive.

For plant material originally of wild origin received from cultivation within the US (botanical gardens, private collections, etc.), relevant documentation (especially CITES and any source country collecting/export permits, as applicable) should be sought, if available and appropriate, from the donor and deposited in the archive.

Selection Criteria

Plant material is acquired by MBC in accordance with the following criteria (listed in order of importance):

1. True population samples of seeds (preferable) or plants of documented wild origin.
2. Non-population collections of seeds (preferable) or plants of documented wild origin.
3. For *ex-situ* conservation purposes, seeds (preferable) or plants classified as Rare, Threatened, Endangered, or Critically Endangered, as designated by international, federal, or state agencies or non-governmental organizations specializing in plant conservation.
4. Seeds or plants of botanical, horticultural, or genetic interest, especially those with research or educational potential. Plants that provide support (*i.e.*, shade, structure, etc.) for the Palm and Cycad collections fall in this category.

Modes of Acquisition

Living material that meets one or more of the above selection criteria may be acquired in the following ways:

1. Field collections. Collecting expeditions are primarily the responsibility of MBC's Cycad and Palm Biologists, although contract collectors may also be utilized. Field collectors (whether they are MBC employees or contractors) must comply with all relevant local, national, and international laws and regulations with respect to the collection and movement of plant materials. Typically, approximately half of the living material collected during an expedition is provided to a recognized institution in the country of origin. When ample material is available, duplicate collections are encouraged for the purpose of providing a reserve of valuable documented material should MBC's collections be damaged or destroyed. Duplicate herbarium vouchers are deposited in one or more herbaria within the country of origin and in the U.S.

2. Gifts. MBC encourages gifts to MBC of seeds or plants, particularly those of documented wild origin. All gifts become property of MBC; as such, donors may not place restrictions on gifts, unless such restrictions have been placed on the plants by the country of origin. MBC reserves the right to refuse, remove, donate, and/or dispose of gifts. No member of the MBC Staff may give appraisals for the purpose of establishing the tax-deductible value of gifts.
3. Exchanges. The exchange of living material with other gardens and institutions is encouraged but will be subject to approval by MBC.
4. Purchases. Plant purchases (typically trees to support the palm and/or cycad collections) may be made by the appropriate Biologist or Curator, with approval from Living Collections Manager, and if necessary and appropriate, in consultation with MBC's landscape architectural consultant. Original receipts/invoices are submitted to the Living Collections Manager for deposit in the Montgomery Archive.
5. U.S. Fish & Wildlife Service (USFWS) Plant Rescue Center (PRC) submissions. MBC is a registered PRC for palms and cycads. Living material imported into the U.S. in violation of CITES and confiscated by the USFWS may occasionally be offered to MBC. The decision to accept or refuse PRC material will be made by the relevant biologist. By accepting PRC material, MBC agrees to adhere to all established laws, rules, and regulations concerning the disposition, maintenance, documentation, use, and ultimate fate of the material. According to the current provisions, PRC plants are property of the US Government, but their seeds and progeny become the property of the PRC.

Accessioning

Living plant material acquired by MBC (e.g., through expeditions, donations, or exchanges) that substantially contributes to MBC's mission and corresponds to the conditions in the Planting Policy and Selection Criteria is accessioned upon its arrival. Staff involved with accessioning (e.g., Collections Database Supervisor) should consult with the Collections Manager to decide in particular cases when there is ambiguity about the desirability of accessioning a particular plant. Alternatives to accessioning include declining to accept material or donating it to another party. Because accessioning involves a significant commitment by MBC to ongoing record keeping and because MBC's resources are limited and its mission focused, the decision to accession plant material should be taken very seriously.

The Living Collections Manager is responsible for the overall management of the plant records system, in collaboration with the Cycad and Palm Biologists, Collections Database Supervisor, Collections Specialist, and Seedbank Coordinator. The plant records system includes electronic and hard copy accession, planting, maintenance, phenology, distribution, removal, and map records.

Removal from the Grounds Collection

MBC continually aims to improve the scientific usefulness and value of the plant collections. Plants in the Grounds or Nursery Collection that lack detailed provenance information may be removed with permission from the relevant Biologist and the Executive Director, subject to compliance with applicable laws and regulations. Removal information, including the reason for removal and the plant's ultimate fate (e.g., plants may be cut down and discarded or removed and donated), is recorded in the database.

Distribution of Living Material

All living plant material growing at MBC in the Grounds and Nursery—with some exceptions, such as PRC material, which belongs to the U.S. government, or material contractually controlled by the government from the country of origin, or material in transit through MBC—is the property of MBC and

is therefore treated as any other MBC asset. No living material (seeds, plants, pollen, or any other plant parts) of accessioned plants will be released from the property without authorization from the appropriate Biologist, Living Collections Manager or Executive Director, and normally, submission of the appropriate documentation to the Database Supervisor. Distribution information—including botanical name, accession number, type of material, quantity, name and address of the individual or institutional recipient, and intended purpose—is permanently maintained in the electronic database and on hard copy in the Montgomery Archive.

The appropriate Biologist and/or the Living Collections Manager must confirm that living material intended for distribution is not in violation of any existing agreement(s) with another institution, organization, or government. Distribution of living material across political boundaries must be conducted in compliance with all applicable laws and regulations, particularly with regard to phytosanitary documents and the Convention on International Trade of Endangered Species (CITES). MBC is a registered CITES Scientific Institution (#US109). Accessioned living material may be exchanged internationally with other registered CITES Scientific Institutions without the need for obtaining separate CITES Export or Import permits.

Living material may be distributed by any of the following methods (listed in no particular order):

1. Gifts for research purposes. Living material may be sent to botanical specialists for their use in research projects.
2. Pollen for producing artificially propagated seeds. Pollen may be sent to botanical specialists, curators, and/or collectors for the purpose of producing artificially propagated seeds. MBC may request a portion of the seeds as compensation for supplying the pollen.
3. Exchange. To safeguard MBC's plant collections against loss and to increase the collection holdings, exchange between recognized botanical and/or scientific institutions and organizations is encouraged. Exchange material sent from MBC will consist of duplicate original material, material poorly suited to growing in MBC's Grounds Collections, vegetative propagules, seeds, or plants propagated (naturally or artificially) at MBC. Decisions about material exchange (both material to be received and sent) will be made by the appropriate Biologist, Living Collections Manager, or Executive Director.
4. Distribution to the public. Seeds from the MBC/FNGLA Seedbank are regularly distributed to Seedbank members, with additional seeds auctioned by the FNGLA. Excess plants from the Nursery and Grounds collections may also be donated to the public or distributed to MBC Staff and Volunteers.

In some cases, MBC may initially distribute some or all incoming material, prior to or after accessioning, to another party or parties (e.g., gardens, universities, or experts) to ensure survival and conservation of the germplasm. Such cases include the following:

1. When an abundance of seeds with high germination rate is collected in excess of MBC's needs. Initial distribution of such material to other gardens/collections is desirable for conservation.
2. When valuable plant material is collected or received that is unlikely to survive under environmental conditions at MBC (e.g., plants that have a history of failing under South Florida weather or soils). In this case, it is desirable to provide the material to another responsible party capable of providing better and appropriate growing conditions, rather than risk probable loss of the germplasm.

Evaluation

The overall health, maintenance, and general condition of the palm and cycad collections are evaluated continuously throughout the year by the Palm and Cycad Biologists in collaboration with the Curators and the CD Staff. Outside experts may also be invited to evaluate groups of plants and provide additional perspective and ideas on collections maintenance. Electronic and hard copies of collection evaluation reports are maintained permanently in the Montgomery Archive.

Maintenance

MBC's Curators, under the direction of the Superintendent, are responsible for the care and maintenance of the living collections. Their primary goal is to keep the plants healthy and reproducing to the best of their abilities. Priority care is given to documented plants of known wild origin as well as those actively being used for research, education, conservation, and/or display.

The Living Collections Manager, in collaboration with the CD Staff and the Curators, is responsible for maintaining an accurate, complete, and current plant records system consisting of filed and permanently archived paper records as well as a computerized electronic database and mapping system. An automated, complete backup of the electronic plant records database is conducted weekly on an external hard drive, and an additional backup is done quarterly to the Cloud.

Inventory

A complete inventory of the Nursery and Grounds Collections is conducted annually to ensure the accuracy of plant names, records, labels, and maps. The Nursery inventory is done by the Nursery Curator and the Database Supervisor using computer-generated plant lists. The Grounds inventory is led by the Collections Specialist with assistance from interns, volunteers, and/or fellows. Maps and associated plant lists are used in the field to verify each specimen's location, accession number, name, and provenance. Plant health/condition and phenological data are also noted during the inventory, and the accuracy, physical condition, and placement of all plant labels is evaluated. Post-inventory forms are provided to the Curators for follow up. Inventory data are entered into the plant records database, updated maps are generated, and annual statistics—including but not limited to the number of living plants, accessions, taxa, genera, and families in the living collections—are produced by the CD Staff.

Access and Use

MBC is committed to providing reasonable open and equal access to its collections and associated collection information consistent with its stewardship responsibilities. Physical and intellectual access to the collections must be balanced against preservation and protection concerns. Prior to their arrival at MBC, visitors must request permission from the appropriate Biologist, Living Collections Manager, or Executive Director to access the collections. Upon arrival, visitors sign the guest register and report to the MBC staff. No accessioned material will be released from the property without permission from the appropriate Biologist, Living Collections Manager or the Executive Director and, normally, completing an MBC Material Permission Form. MBC maintains the right to refuse access to the collections and/or associated collection information because of, but not limited to, considerations of resource limitations, security, availability, intellectual property requirements, applicable restrictions, and time constraints.