

# Living Plant Collections Policy

*Approved June 10, 2005*

## INTRODUCTION

### *Authority and Purpose of Policy*

This policy is that of the governing authorities of the Chihuahuan Desert Research Institute (CDRI) and as such, must be approved by the Board of Directors of the Chihuahuan Desert Research Institute.

The purpose of the policy is to provide guidance and focus to those charged with the planning, development, and management of the collections of the Chihuahuan Desert Research Institute Botanical Gardens (known hereafter as "Gardens"), with the aim of optimizing utilization of available resources to realize the CDRI's mission through effective and appropriate collections development.

### *Responsibility for Implementation and Review*

Periodic review and recommendations for revision of this policy shall be the responsibility of the Botanical Garden Committee. The administration of the policy is the responsibility of the Executive Director and the implementation of the policy is the responsibility of the staff. The Botanical Garden Committee shall be comprised of interested CDRI Board Members and the following professional staff: the Executive Director, the Collections Curator, and the Education Coordinator. Professionals not associated with the CDRI may also serve on the committee in an advisory capacity. The Botanical Garden Committee shall meet in conjunction with a Board of Directors meeting at least once a year to review and recommend revisions to the policy.

## PURPOSE OF THE COLLECTIONS

The overall purpose of the collections of the Chihuahuan Desert Research Institute's Botanical Gardens is to provide educational, recreational, and research opportunities associated with plants of the Chihuahuan Desert region. To achieve this purpose, the collections shall be managed in such a way as to facilitate: 1. the collection, display, and study of plants of the Chihuahuan Desert region; 2. maintenance of the Botanical Gardens for public use and education; 3. conduct research on selected aspects of plants from the Chihuahuan Desert region.

### *Primary and Support Collections*

The primary collections of the Gardens are its collections of living plants. Support collections include a library, pollen reference collection, and a photo library.

## ACQUISITION

Plants acquired by the Chihuahuan Desert Research Institute must meet the goals and objectives of the Gardens and be in accordance with the selection criteria delineated in this policy. It is of fundamental importance that plants only be acquired by the Gardens when proper maintenance and care can be assured for them in terms of staff time, water, facilities, and space.

Plant acquisition at the Gardens will be specifically related to the particular sub-collection for which the acquisition is intended. The sub-collections of the Gardens are of three major types: 1. eco-geographic collections, 2. taxonomic collections, and 3. specialty gardens.

*Eco-geographic collections* consist of the following:

- Chihuahuan Desert Scrub
- Semi-arid Grasslands
- Oak-Pinyon-Juniper Woodland
- Conifer Woodlands
- Riparian Communities

*Taxonomic Collection* strengths consist of the following:

- Cactus and succulent collections
- Woody legume collection
- Rose family collection
- Agave family collection
- Cypress and pine families

*Specialty collections* consist of the following:

- Wildscape Demonstration Garden
- Desert Plant Specialty Garden
- Hummingbird and Butterfly Garden

#### *Selection Criteria*

As noted above under Purpose, plants selected for acquisition by the Garden should be native to the Chihuahuan Desert region.

Acquisitions planned for outdoor display should be adapted to the ambient temperature conditions of the site. For practical purposes, this means that specimens should be able to withstand minimum temperatures of  $-5$  to  $-8^{\circ}\text{C}$  when mature and extended maximum temperatures of  $38^{\circ}\text{C}$  or over during the summer.

Acquisitions for display in the Cactus and Succulent Display houses should be able to withstand temperatures in excess of  $40^{\circ}\text{C}$  in summer and be able to survive near-freezing temperatures in the winter.

In addition to the environmental criteria noted above, primary plant selection criteria to be applied to potential acquisitions are: 1. economic or ethnobotanic utility; 2. functional or landscape potential; 3. rare, threatened or endangered status; 4. wildlife support potential; 5. dominance or importance within the Chihuahuan Desert region; and 6. educational/interpretive potential.

Whenever possible, plant acquisitions should be of known wild origin. The above is of particular importance in the case of acquisitions for the taxonomic collections.

Acquisitions of horticultural cultivars for specialty gardens should be accompanied by adequate information to ensure their trueness to type. Acquisitions may be from other botanical institutions, field collectors, commercial sources, or gifts.

#### *Initiation and Approval of Acquisitions*

Recommendations for acquisitions to the collections can be initiated by staff, volunteers, persons serving on the CDRI Board of Directors or the CDRI Board of Scientists, or other interested members of the public. Acquisitions are initiated by submittal of a CDRI Plant Proposal Form to the Botanical Garden Committee. Minor acquisitions (annuals, short-lived perennials) will be approved by the staff member responsible for their care. Major acquisitions (entire collections, long-lived perennials) must be approved by the Botanical Garden Committee. Responsibility for implementation of acquisitions, preservation, and promulgation lies with the Executive Director of the CDRI.

#### *Legal and Ethical Aspects of Acquisitions*

The Chihuahuan Desert Research Institute is committed to adhering scrupulously to both the letter and spirit of the laws, regulations, and conventions, be they local, state, national and international in scope, which govern and regulate the taking and transport of protected plant taxa. The CDRI will not purchase nor accept gifts of such taxa if reasonable doubt or concern exists concerning their origin.

The CDRI is committed to taking a careful and watchful posture as regards the introduction of potentially aggressive, or diseased exotic species into the local ecosystem.

#### Gifts

All potential acquisitions presented to the CDRI Botanical Gardens as gifts are subject to the same policies and selection criteria outlined above for acquisitions in general. Acquisitions received as gifts are considered unconditional as regards the eventual disposition of the gift. The CDRI reserves the right to display or not display, sell, give away, or destroy the acquired gift.

Any special situations in which conditions or restrictions on the disposition of a gift may be deemed appropriate shall be reviewed by the Botanical Garden Committee. The recruiting recommendation shall be made to the governing authorities of the CDRI, who may choose to seek legal counsel in the matter. The CDRI will not appraise gifts as to value.

#### PLANT RECORD SYSTEM

The CDRI is committed to the maintenance of accurate, up-to-date, and pertinent records on its accessioned living collections.

##### *Responsibility for Records System Upkeep*

The staff responsible for specific parts of the collections are responsible for the accuracy and timeliness of input into the plant records system of information pertinent to their areas of responsibility. The administrative and oversight of the plant records system shall be the responsibility of the Executive Director of the CDRI.

##### *Timeliness of Records Upkeep*

Germplasm destined for inclusion in the Botanical Garden's living collections shall be accessioned as soon as is practical after arrival at the Gardens. Germplasm derived whether sexually or vegetatively from parental stock already in the Garden's collections shall be accessioned independently of the parental stock and their lineage noted. Changes in the status of an accessioned item (e.g. change of location, death, removal) shall be noted in the records system as soon as possible after the status change has taken place.

##### *Plants to be Accessioned*

Plants obtained for purposes of resale, or member distribution shall not be accessioned. Plants originally obtained for resale and subsequently earmarked for inclusion in the living collections shall be accessioned at the time of transfer. Plants obtained for temporary educational or research purposes shall not be accessioned.

##### *Minimum Information Required*

Information pertinent to the item's taxonomic classification, place of origin (including latitude and longitude if collected from the wild), source, time of acquisition, and present location shall be kept on all items in the living collections. Further information shall be kept on specific items as is needed and practical.

##### *Periodic Inventory*

Field inventory of the living collections shall be carried out every three years and is the responsibility of the staff member responsible for the given area of the Gardens. One-third of the field collections should be inventoried each year. Inventories will be submitted to the Executive Director upon completion.

#### CARE OF THE COLLECTIONS

The living collections of the Garden are to be maintained in as healthy and attractive a state as is practical given the ambient conditions of the Garden.

In keeping with the Garden's stated purpose, conservation of water resources is an important aspect of plant care. Irrigation water will be generously available to plants during the establishment period only, after which most

collections should require low to moderate irrigation for their maintenance. If an item in the collection is not performing adequately under the above regime, it should be considered for deaccessioning.

Particular, limited collections such as those at the Memorial Grove, may be constituted as “mini-oases” and receive larger amounts of water. Collections of rare, threatened or endangered species shall receive priority care. High public profile collections such as the Visitors’ Center Garden, the Memorial Grove, and the cacti collection shall be considered as high priority collections as far as level of maintenance is concerned.

#### *Safeguarding Collections*

The CDRI is committed to horticulturally safeguarding its living collections within the limits of accepted professional horticultural practices and the constraints of the ambient climatic/environmental conditions of the site, as noted above. The Garden shall safeguard its collections from breaches of security by employment of adequate and practical risk management procedures. Collections records shall be safeguarded by means of adequate security provisions and records backup.

#### EVALUATION OF COLLECTIONS

Field evaluation of the living collections shall be carried out every five years and is the responsibility of the CDRI staff member responsible for the given area of the Garden. One-fifth of the collections should be evaluated each year. Evaluations shall be aimed at determining the continued appropriateness and relevance to the Garden’s mission of particular items in the living collections, and/or the item’s degree of adaptation and performance under the Garden’s ambient conditions. Evaluations will be submitted to the Botanical Garden Committee upon completion, and may become the basis for recommendations as to maintenance, repropagation, or deaccessioning.

#### DEACCESSIONING AND DISPOSAL

It is the philosophy of the Chihuahuan Desert Research Institute that its collections are a permanent part of the public trust. It is realized, though, that at times it may be in the public interest to remove certain materials from the collections. The following policy applies to material owned by and accessioned into the permanent collections of the Chihuahuan Desert Research Institute. Deaccessioning of dead or dying plants shall be the responsibility of the Horticulturist responsible for the material. Requests to deaccession living plants shall be directed to the Executive Director of the CDRI who will arrange for consideration of such requests by the Botanical Garden Committee. Upon receipt of a recommendation from the Botanical Garden Committee for the deaccession of a living plant, responsibility for final approval to deaccession lies with the Executive Director of the CDRI, with full consideration of concern for the public trust.

A. The decision to deaccession may be made for the following purposes:

1. To permit destructive analysis, provided that the information expected to be obtained is deemed to outweigh the value of the specimen and its possible future uses;
2. To remove material that is potentially hazardous to other collections or to human health; or which may become invasive and damaging to the environment;
3. To transfer to another arboretum, botanical garden, zoo, museum, or educational or scientific institution, material that is deemed by the Botanical Garden Committee to be significantly more useful and relevant to the collections and programs of the other institution than to those of the Garden;
4. To relieve the Garden of the responsibility and care for material that has died, or whose condition has deteriorated to the point where it is no longer of use;
5. To carry out mutually beneficial exchanges of materials with other arboreta, botanical gardens, zoos, museums, or other educational or scientific institutions;
6. To relieve the Garden of the responsibility and care for material that does not fall within the Garden’s scope of collections or serve its purpose.

B. The following restrictions will apply to deaccessioning:

1. Title or ownership of the material must be determined to reside with the CDRI;

2. Original restrictions or requests related to the use or disposition of the material will be considered;
3. Employees and volunteers of the Garden, their families and representatives are prohibited from acquiring material deaccessioned by the Garden;
4. No transaction will be carried out if it violates state, federal, or other applicable laws, or if in violation of CDRI policy.

C. The following principles will govern disposition:

1. Whenever possible, disposition shall be to other programs within the CDRI, e.g. education or plant resale, or to other arboreta, botanical gardens, zoo, museums, or education or scientific institutions by exchange of material or services or by sale;
2. No prehistoric material or material from any archaeological context, prehistoric or historic, shall be sold;
3. No exchanges or privately arranged sales may be made except to other museums or educational or scientific institutions;
4. Destruction of items for purposes other than analysis may be carried out only when no other method of disposal is available or feasible;
5. Disposal of hazardous materials shall follow all applicable laws and safety guidelines.

#### ACCESS TO COLLECTIONS

The living display collections located on the Chihuahuan Desert Nature Center & Botanical Gardens grounds, as indicated by maps and directional signage, shall be open to all duly admitted members of the visiting public. Access to the collection records shall be open to members of the Botanical Gardens Committee and CDRI staff. Requests for information from the collections records shall be referred to the Executive Director. There will be a charge for records search time and reproduction of work when the scope of the request is considered to be beyond trivial.

#### *Loans*

It is the policy of the Chihuahuan Desert Research Institute not to loan accessioned items.

#### *Availability of Propagules*

Limited numbers of propagules from the living collections may be taken if the taking of them in no way endangers the health of the plant from which they are taken. Staff members belonging to the Botanical Gardens Committee may authorize the taking of propagules. Access to the collections for the purpose of obtaining propagules may be granted to sister botanical institutions, educational institutions, and horticultural industry persons in the case of taxa that are not practically available elsewhere and for which introduction into the trade is deemed worthy. The member of the Botanical Gardens Committee granting permission will be responsible for the behavior and supervision of the person obtaining propagules.

#### *Special Access*

Collection areas under development and backup growing areas not normally open to the general public shall be accessible by permission, grantable by a majority of members of the Botanical Gardens Committee or by the Executive Director of the CDRI. Access to the records by persons other than those on the Committee shall be grantable by a majority of members of the Committee or by the Executive Director and shall be by appointment. The responsibility for the security of the collections during access shall be that of the person authorizing access and shall be under the supervision of that person.