

# Building Plant Collections



**Brandi Eide**



**SPRINGS  
PRESERVE®**

[www.springspreserve.org](http://www.springspreserve.org)

# Building Plant Collections – Why?

- Directive
- Mission
- Goals
- Bored, have too much money, time, staff



*Pilosocereus palmeri*

# Building Plant Collections

- What is your goal?
  - Display
  - **Research**
  - **Conservation**
  - +Strengths
  - Education
  - Interpretation
  - **Restoration**
  - Geography
  - Family



*Deuterocohnia longipetala*

# Building Plant Collections

*Mammillaria geminispina*

- Research, Conservation, Restoration
  - Higher level of data needed
  - Genetic variation
  - Data quality/quantity useful for research
  - Tracking\*\*
  - Genetics
  - Lineage, propagation



# Building Plant Collections

- Where are your current strengths/weaknesses?
  - Robust family/genus/group of plants
  - Where can you expand? Plants that make sense?
  - Unique environment? Alpine, desert...



# Building Plant Collections

- Limitations
  - Funding – source plants, shipping, can you generate income from collections? Restrictions
  - Staffing – registrar, plant collections managers, curators, propagator, for planting, tracking, maintenance, volunteers
  - Space – storage, indoor/outdoor, area to develop or supplement existing plantings

# Building Plant Collections – How?

- Identify
  - Priorities
  - Strengths
  - Weaknesses
  - Needs/wants
  - Opportunities
- Support
  - Promote idea – to whom?
  - What will it add to the institution
- Resources & limitations
  - Funding
  - Space
  - Staff

# Needs

- Funding
  - Materials, plants, seed, pots, soil, labels, tables
  - Collecting trips
  - Maintenance
- Space
- Staff
- Additional resources...

*Arctomecon californica*





# Needs

- Funding
  - Materials, plants, seed, pots, soil, labels, tables
  - Collecting trips
  - Maintenance
- Space
- Staff
- Additional resources...

# Opportunities

- Conservation
- Restoration
- Research
- Interpretation
- Education
- Tours
- Workshops
- Citizen science
- Grants
- Collaborate with other gardens/arboreta

# Collection Policy

- Informs & guides development, management & review of the plant holdings
- Plant records management procedures
  - Standards for: acquisition, care, documentation
  - De-accessioning & disposal
  - Core data captured & retained
  - Updated & current information
- Review of holdings

*Stenocereus eruca*



# Plant Records *Collections Policy*

- Protocol for tracking
- Who is responsible for each step?
- What do you accession?
  - All plants? Those with data? Wild collected?
- When do you accession?
  - After 1 yr? Seedlings? Certain container size?
- How do you track lineage?
  - Seedlings (controlled pollination?), divisions, pups, cuttings? Track back to mother plant? Plan ahead

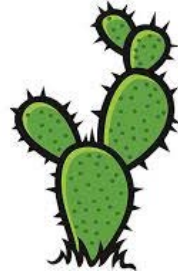


# Who is responsible?

- Critical to identify information needed, who will collect & maintain it at every step
  - Collection/acquisition
  - Nomenclature accuracy/changes
  - Health/inventory/mapping
  - Moving/removing
  - Propagation if needed & subsequent tracking
  - De-accessioning/disposal
  - Regulatory- sales, exchanges, permits, grants, tracking
- Ensure you have enough staff to follow necessary procedures & that record forms hold adequate data
- Train all staff & volunteers (raking, dead)

# Let's get this party started *Collection Planning*

- Development
  - Goal, what/why/when
  - Acquisition, where/how
- Committee
  - Involve stakeholders early
  - Educate people continually
  - Update



## *INVITATION*

What: Plant Collection Party, Cactaceae  
Why: Because it's our mission  
When: Spring 2018-until we drop  
Where: Spring Mountains  
BYOS: Bring your own shovel

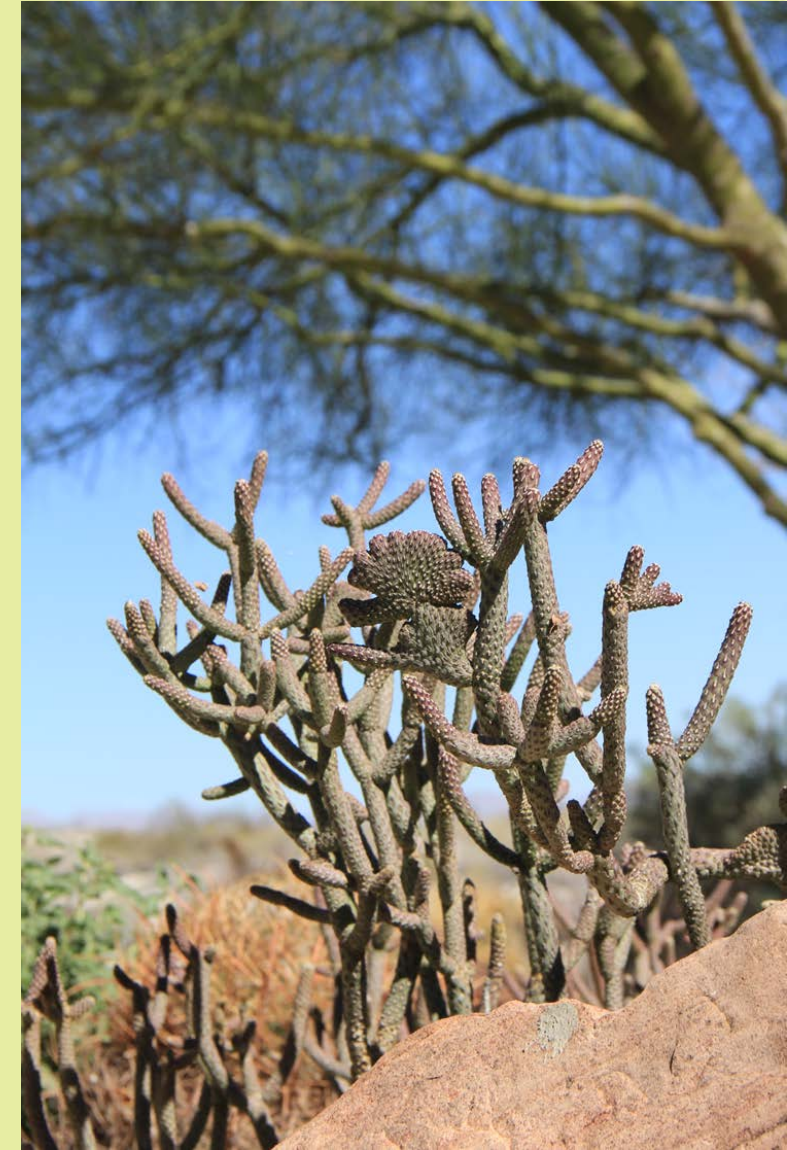
# Collection planning

- Management
  - Documentation protocol, tracking
  - Assign responsibility for all steps
- Review holdings
  - Health
  - Inventory
  - De-accession
  - Disposal

# Collection needs

- Maintenance
- Tracking, inventory
- Succession, restoration, conservation, sales
- Propagation, collection, seed, voucher, volunteers
- Promoting, sharing

*Cylindropuntia ramosissima*



# Sourcing material

- Collecting trips
- Other gardens/arboreta
- Botanic Gardens Conservation International, BGCI
- Indices Seminum
- Seed banks
- Seed sources worldwide (quality/accuracy of taxa id?)
  
- PCN through APGA to accredit collection

*Echinocereus triglochidiatus*

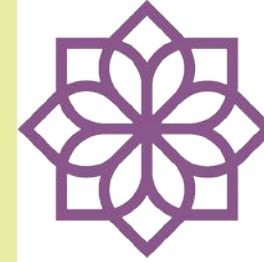




# Index Seminum

- Some BGs offer seed, provenance, open pollination, etc.
- Seed is free to institutions, exclusively for scientific, educational & conservation purposes.
- Comply with the Intn'l Plant Exchange Network (IPEN) guidelines listed in terms & conditions, follow Convention on Biological Diversity (CBD) guidelines
- Some require cataloguing source of material & other data upon receipt
- Some online, some a catalog mailed
- International

# Plant Collections Network



Plant  
Collections  
Network

AMERICAN PUBLIC GARDENS ASSOCIATION

- Collaboration between APGA & USDA Agricultural Research Service
  - ✓ Germplasm preservation
  - ✓ Expand diversity of collections
  - ✓ Build awareness
  - ✓ Standard of excellence in collections management
- Offer resources, opportunities & funds to institutions caring for Nationally Accredited Plant Collections

# Criteria for Network Participation

- American Public Gardens Association Member
- Active Collections Management Program including plant records database, accession labels, maps
- Long-Term Commitment to maintain collection
- Endorsement of Governing Body
- Current Collection has 50% or more of ultimate collection scope
- Collections Policy
- Curator for Collection
- Access to Collection for research, evaluation and plant introduction

Contact Pam Allenstein 610-708-3015 [pallenstein@publicgardens.org](mailto:pallenstein@publicgardens.org)



Member's Area >



PlantSearch >



ThreatSearch >



GlobalTreeSearch >



GardenSearch >



Sign up to  
Cultivate >  
Receive news and  
updates

BGCI > Plants

### Request information on plant species

**INTENDED USE:** This service is designed to facilitate communication between plant collection holders, researchers, educators, and other plant conservation professionals. Its primary use is to request or share information or plant material for research, education or conservation purposes.

To send a request about the plant you selected to all gardens that report maintaining it in their collections, please complete the form below as thoroughly as possible.

Please note that BGCI is not responsible for the accuracy of the information contained here, nor is it directly involved with or responsible for the response of individual gardens to your inquiry.

Information requested for plant: *Echinocactus polycephalus* subsp. *xeranthemoides*

Your Name:

Email:

Job Title:

Institution:

My institution is a member of BGCI

**Please indicate the purpose for your request (check all that apply):**

- Plant tissue for DNA analysis or other research purpose
- Seeds or other living material for conservation, education, or research purposes
- Propagation or cultivation information for conservation, education, or research purposes
- Other (please provide additional details in the Comments box below)

**Comments/Additional Information:**

Please note that your request may not be able to be fulfilled by individual gardens due to Convention of Biological Diversity (CBD) compliance issues (see <http://www.bgci.org/resources/abs/> for examples). To help gardens process your request, please check the below box if appropriate.

Material will not be used for commercial/for-profit activities or lead to commercialisation

- PlantSearch >
- About PlantSearch >
- PlantSearch Upload Instructions >



Member's Area >



PlantSearch >



ThreatSearch >



GlobalTreeSearch >



GardenSearch >

BGCI > PlantSearch

# Welcome to PlantSearch!

English (EN) | [En Español \(ES\)](#) | [日本語 \(JA\)](#)



The only global database of living plant, seed and tissue collections:

- Search 1,325,989 collection records, representing 534,626 taxa, at 1,088 contributing institutions
- Locate threatened, rare, medicinal and other plant species in living collections
- Connect with living collections to aid your conservation, education and research efforts

Enter search criteria below (all fields optional)

Scientific name:     Exclude cultivar names

Genus                      Species                      Intraspecific Epithet

Conservation Status: IUCN Red List   Additional Status: Crop Wild Relative

IUCN Red List 1997    Medicinal plant species

CITES listed species

Threatened Global Trees Campaign species

Which IUCN list should I choose?

We found 4 matches

#	Plant Name	Name Status	IUCN Red List	IUCN Red List 1997	CITES Appendix	Invasive Species Compendium fact sheet	CWR	No. of ex situ sites worldwide	Contact ex situ sites
1	<a href="#">Echinocactus polycephalus</a>	<a href="#">Accepted</a>	<a href="#">Least Concern</a>	-	II	-	-	16	<a href="#">Send Request</a>
2	<a href="#">Echinocactus polycephalus var. polycephalus</a>	<a href="#">Synonym</a>	-	-	-	-	-	4	<a href="#">Send Request</a>
3	<a href="#">Echinocactus polycephalus subsp. xeranthemoides</a>	<a href="#">Accepted</a>	-	-	-	-	-	4	<a href="#">Send Request</a>
4	<a href="#">Echinocactus polycephalus var. xeranthemoides</a>	<a href="#">Synonym</a>	-	-	-	-	-	0	<a href="#">Send Request</a>

# Promote your collection/goals

## Before, during & after

- Spread the word
- Tell donors, volunteers, local community & garden community, visitors, staff, media
- Write articles
- Get board, staff and volunteer support
- Fund raise
- Updates

*Yucca baccata*





Thank  
you!

## Terms and conditions

Against the background of the provisions and decisions of the Convention on Biological Diversity (CBD) and in particular those on access to genetic resources and benefit-sharing, the Hortus Botanicus Amsterdam is dedicated to promoting the conservation, sustainable use, and research of biological diversity. The garden therefore expects its partners in acquiring, maintaining and transferring plant material to always act in accordance with the CBD.

The responsibility for legal handling of living plant material passes on to the recipient of the material. The requested plant material will be supplied on the following conditions, as drafted by the [International Plant Exchange Network](#) (IPEN):

1. The plant material is supplied only for non-commercial use such as science, conservation and educational purposes. Should the recipient at a later date intend a commercial use or a transfer for commercial use, the country of origin's prior informed consent (PIC) must be obtained in writing before the material is used or transferred. The recipient is responsible for ensuring an equitable sharing of benefits.
2. On receiving the plant material, the recipient endeavours to document the received plant material, its origin (country of origin, first receiving garden, 'donor' of the plant material, year of collection) as well as the acquisition and transfer conditions in a comprehensible manner.
3. In the event that scientific publications are produced on the supplied plant material, the recipient is obliged to indicate the origin of the material (the supplying garden and the country of origin) and to send these publications to the garden and to the country of origin without request.
4. On request, the garden will forward relevant information on the transfer of the plant material to the body charged with implementing the CBD (ideally, the national focal point in the garden's home country).
5. The recipient may transfer the received plant material to third parties only under these terms and conditions and must document the transfer in a suitable manner.

**By ordering seeds or other plant material, the recipient accepts the above terms and conditions and pledges to act accordingly.**

Hortus Botanicus Amsterdam, Netherlands (AMD), 2017.