Estrella Mountain Regional Park
Healing Garden
Traci Arellano | Spring 2014
Therapeutic Landscapes Network defines a healing garden as, “any landscape, designed or wild, that facilitates human health and well-being.”
**THOUGHTS**

- Officially received approval for EMRP Sensory Garden to be my Applied Project 😊
- What that means…
  - Start January 13, 2013; Ends May 4, 2013 (16 weeks)
  - Must answer: How does this project advance Landscape Architecture as a profession?

**Deliverables**

- Daily Project logbook (printed & bound)
- Construction documents (2’x3’)
- Overall Site Plan
- Dimensioning Plan
- Preliminary Design Plan / Planting Plan
- Irrigation Plan
- Lighting Plan
- Hardscape Plan (construction drawing & details)
- Irrigation Plan
- Conceptual documents (2’x3’)
- Photoshop renderings
- Site Transects (N-S; E-W)
- Sensory Gardens
- Level of completion depends on funding, staffing, in-kind services, etc.

- More deliverables
  - More deliverables
  - More deliverables

**Miscellaneous**

- Externship with Chad Robert
- Ken Brook – survey, statistical data, etc.
- Case study of the area

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**PRELIMINARY TIMELINE**

- **Jan 13 (1)**
  - Semester begins 😊
  - Meet w/ Ken Brooks re: important dates; pin-ups
  - Meet w/ Ted Cook re: strengths & weaknesses of proposal
  - Meet w/ Rebecca Fish-Ewan re: deliverables; requirements
  - Meet w/ Denise re: important dates; deliverables; timeline

- **Jan 20 (2)**
  - Overall Site Plan
  - Aerials AutoCAD line drawing
  - Get ¼ sections from county?

- **Jan 27 (3)**
  - Dimensioning Plan

- **Feb 3 (4)**
  - Preliminary Design Plan
  - Irrigation Plan

- **Feb 10 (5)**
  - Planting Plan
  - Cost Estimate

- **Feb 17 (6)**
  - Lighting Plan

- **Feb 24 (7)**
  - Hardscape Plan (construction drawing & details)

- **Mar 3 (8)**
  - Site Transects (N-S; E-W)
  - Photoshop renderings

- **Mar 10 (9)**
  - Spring Break

- **Mar 17 (10)**
  - Construction begins…

- **Mar 24 (11)**
  - TBD

- **Apr 7 (12)**
  - TBD

- **Apr 14 (13)**
  - TBD

- **Apr 21 (14)**
  - TBD

- **Apr 28 (15)**
  - Last day of classes 5/02/14

- **May 5 (16)**
  - Week of Finals

- **May 12 (17)**
  - Graduation

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**ADDITIONAL TO-DOS**

- Met w/EMRP park supervisor Don Harris & Ranger Amy for irrigation and ideas
- Meet w/Todd Briggs
- Meet w/Kris Floor
- Visit sensory gardens:
  - Arrowhead Park
  - Desert Botanical Gardens
  - Tucson Desert Museum

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**Preliminary Timeline**
Week of January 20, 2014
• Maricopa County Parks & Recreation Department
• West Valley Arts Council
• Three Rivers Historical Society (3RHS)
- Healing garden
- Centennial trailhead
- School desert awareness
- Environmental programs
- Special events
- Picnic area
- Community volunteer site
Statement of Intent

If there is public access to visitors and staff to a healing garden in close proximity to the publically visited Nature Center at Estrella Mountain Regional Park then there will be a substantial increase in benefit to well-being of the participants by engaging human senses through natural stimuli and observation of wildlife.
SITE PANORAMA: Future site of the healing garden
• Estrella Mt Regional Park is 19,840 sq acres in Goodyear, AZ
• Located near the meeting of the Gila and Agua Fria rivers
• First park in county system established in 1954
• Site is directly southwest of the park’s Nature Center
Healing/sensory gardens are fast becoming a place of refuge for urbanites from the daily grind and the stressors that accompany our fast-paced world. Gardens are often green places of respite and solitude that can help to recharge our mental capacity to cope. This healing garden’s purpose will be to help re-acknowledging the healing powers of nature that have been known and used for centuries, but have gone by the wayside as western medical advances moves toward technology and pharmacology and farther from the view of treating mind-body-spirit as a whole.

GOALS
The main area of interest is the recessed area to the SW of the nature center which is already a retention area where water is directed away from the building. The garden design will...

- Be reflective of the low-land Sonoran desert species
- Create a microhabitat for birds and butterflies
- Support vegetation that is lush versus just surviving
- Have seasonal color/textural interest
- Incorporate plants that represent the native culture (edible/medicinal)

SITE FACTS
- Estrella Mt Regional Park is 19,840 sq acres in Goodyear, AZ
- Located near the meeting of the Gila and Agua Fria rivers
- First park in Maricopa County system established in 1954
- Part of a larger portfolio which is the Centennial Trail
CENTENNIAL TRAIL PORTFOLIO: *Part of the whole*

- Part of a larger portfolio which is the Centennial Trail
- Trailhead with half-mile looped barrier-free trail
- 11 exhibit area nodes
- Community-led/grassroots project
- Official Arizona Centennial Legacy status by the Arizona Historical Advisory Commission.
REVISED TIMELINE

Week of February 3, 2014

Additional to the Schedule:
- Meet with EMRP park supervisor Don Harris & Ranger Amy for irrigation and ideas
- Meet w/Rebecca x1/wk
- Meet w/Denise X1/mo
- Meet w/design professionals as able: Todd Briggs, Christine Floor
- Visit other sensory gardens as able: Desert Botanical Gardens, Tucson Children's Museum
- Visit the Phoenix Children’s Hospital and other facilities
- Project logbook
- Pin-up boards
- EMRP Meetings

Week of:

Jan 13
Semester begins
Meet w/ Ken Brooks re: important dates; pin-ups
Meet w/ Rebecca x1/wk re: deliverables, requirements
Meet w/ Denise re: important dates; deliverables; timeline

Jan 20
Overview (site plan existing)
Meet w/ Rebecca x1/wk
Meet w/ Ken Brooks
Meet w/ Denise

Jan 27
Dimensioning Plan (existing)
AutoCAD line drawing

Feb 3
Start project logbook
Start annotated bibliography
Start working on web pages

Feb 10
Visit healing gardens in Phoenix/Scottsdale area
City of Glendale’s Elsie McCarthy
Banner Good Samaritan
Phoenix Children’s Hospital
Scottsdale Healthcare Thompson Peak
Scottsdale Unified School District
Mercy Gilbert

Feb 17
Write up case studies (3)

Feb 24
Preliminary (proposed) Design Plan
Photoshop renderings
Pin-up #1 (2/28)

Mar 3 (8)
Parking Plan

Mar 10 (9)
Siting Break

Mar 17 (10)
Irrigation (Requirements) to submit to irrigation professionals
Cost Estimate

Mar 24 (13)
Hardest Plan

Mar 31 (12)
Pin-up #2 (4/4)
“A garden at your workplace may reduce stress”
Ulrika Stigsdotter

U. Stigsdotter found there was “a significant connection between access to a garden and decrease in levels of stress at the workplace” and “gardens at workplaces play an important part in offering a more stress-free environment, irrespective of sex, age or socio-economic background.”

“Natural versus urban scenes: Some psychophysiological effects”
Roger Ulrich

R. Ulrich found that landscapes can be restorative by “reducing negative emotions, holding a person’s attention and blocking stressful thoughts.”

Therese Rivasseau Jonveaux, et al

This study states that healing gardens provide a definite reduction in behavioral disorders such as irritableness, aggression and overall improved health, nutritional status and sleep patterns for Alzheimer’s patient which is measurable in the patient’s well-being.
<table>
<thead>
<tr>
<th>CASE STUDIES</th>
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**BANNER ESTRELLA HOSPITAL | SITE**

**COURTYARD | TYPOLOGY | WEST PHOENIX CITY | YEAR 2005**

The Banner Estrella courtyard has very straight geometric shapes placed asymmetrically in thirds. It has a very modernist feel with the concrete planters and clean lines. The water feature, “running along the outside face of the glass curtain wall spanning the length of the garden along the north side, this feature was a well-placed and welcome transitional element, tying the interior and exterior spaces together.” (Bradley, 2010)

The site has a lot of concrete. The paving, raised planters and water feature is concrete. There looks to be a portion of the linear walkway that is stabilized granite; however, the predominant material is concrete. There is elegance to the simplistic lines but it also makes the atmosphere very sterile and clinical. The plants were aesthetically pleasing and their 'tight' look complemented the concrete material; however, they did not evoke a “cozy” or informal feeling.
Banner Gateway Medical Center is a general medical and surgical hospital in Gilbert, AZ. It performed nearly at the level of nationally ranked U.S. News Best Hospitals in 2 adult specialties, as shown below. Banner Gateway Medical Center has 177 beds.

The healing garden is located in the maternity unit and has restricted access to the patients and their families. On one end is a courtyard which is a special event/seating area which the patient rooms in the 3-story high wing can look down upon. The space is bisected with a wall-water feature that obstructs your view to the play/eating area which invites you over with sounds of water and child laughter. The area is spacious yet cozy. It has abundant shade and a state-of-the-art play equipment with cool loungers for the parents.
Dedicated to healing the whole person—mind, body and soul—Banner Good Samaritan offers an enhanced healing environment for patients and their families. There are six gardens, including the award-winning Healing Garden, provide an atmosphere for reflection and relaxation. To ensure your spiritual and emotional needs are met, interfaith hospital chaplains are available around the clock to meet with families. The healing garden is has multiple topographies and water features. It has inviting alcoves which allow visitors to have quiet conversations or sit among planters of blooming flowers and succulents and other friendly visitors. The garden also sports amazing mosaic pillars that are colorful and the tiles that are used were a community project that was created by patients with inspirational sayings and words.
The Banner MD Anderson Cancer Center Togetherness Garden is reached by entering through a narrow doorway that symbolizes hope and victory at the conclusion of treatment. The facilities were built to heal; Along the way there are wildflowers, water features and stepping stones which all carry a metaphorical message of hope for cancer patients to live a fulfilling life.
The Richard and Annette Bloch Cancer Survivors Park stretches a full block on First Street, from Willetta to McDowell. There’s a nice shaded gazebo surrounded by cactuses, and a colorful obilisk in the center. The highlight of the park are the bronze sculptures by artist Victor Salmones. The piece is called “Cancer...There’s Hope,” and it depicts eight people in various stages of fighting cancer. At the back are five figures meant to represent cancer patients and their supporters as they enter treatment. Treatment is represented by a large bronze maze, and there’s a figure of a young woman working her way through the maze.

There are now 24 Richard and Annette Bloch Cancer Survivors Parks throughout U.S. and Canada. “Cancer Survivor Parks promote survivorship and provide common sense information that will guide and support the patient through his or her cancer journey.”
Elsie McCarthy Sensory Garden is one of the few sensory gardens in the Phoenix area that are owned and maintained in a non-healthcare public space. It is located in the heart of Glendale, Arizona. Funds were donated from the Elsie McCarthy estate and it is maintained by the Glendale Parks and Recreation Department. The garden was developed to stimulate the senses of sight, sound, smell and touch through the use of specific plants and trees for texture and scent, water features for sound, touch and sight and evening lighting for dramatic visuals.
Mercy Gilbert partnered with the Gila River Indian Community to construct the Healing Garden. The components of the garden were designed to work in harmony, providing the community with a place of serenity. The landscape incorporates plants with medicinal uses or qualities. Mercy Gilbert is built on the ancient tradition that love can help heal. Within that framework, the Golden Thread of Compassionate Care is used as a symbol to illustrate the balance between the science and the human spirit.
Phoenix Children’s Hospital in Phoenix, Arizona is ranked nationally in 5 pediatric specialties. Phoenix Children’s Hospital is a 425-bed children’s general facility with 13,404 admissions in the most recent year reported.

The healing garden is located on the facility’s rooftop and is restricted to the patients and their families. This creates a very secure-feeling environment. There are over-sized brightly painted flowerpots that adorn the garden and add whimsy to the area. Additionally there is a lot of funky seating and plenty of shade to encourage users to enjoy the glorious outdoors and incredible views.
The Thompson Peak healing garden was designed “to evoke feelings of well-being, provide places for serenity and rejuvenation, and impart visitors with a sense of connectedness to the natural world.” (Gensler, 2014) Made possible through community philanthropy, the garden offers shaded outdoor gathering spaces, paths interwoven with drought-tolerant plantings, hummingbird and butterfly gardens, and water features. In addition to being visible from many patient rooms and corridors, display walls in the lobby were opened to other areas of the hospital and to draw in patients and visitors.
Healthy nature healthy people: ‘contact with nature’ populations

PETER BROWN and LAWRENCE ST LEGER

CECILY MALLER, MARDIE TOWNSEND, ANITA PRYOR*

Affiliated with the NiCHE Research Team (Nature in Community, Health and Environment)

gardens appear to intuitively understand the personal nature', public health strategies are yet to maximize the with nature. Initial findings indicate that nature plays a Key words

'westernization' has doubled our life expectancy, with potential application for sub-populations, communit-

nature-based interventions. To maximize use of 'contact contact with nature' in the health promotion of populations, collab-

approach to public health that incorporates environmental augmentation of existing health promotion and prevention

et al 2001 (p. 2)

...
1. Does nature play a vital role in human health & wellbeing?

2. Do humans have a deep emotional connection with nature?

3. Do healing gardens provide nature in our urban environment?
individual human needs

nature

urban living

instinctual
physiological
societal
instinctual = mind
physiological = body
societal = spirit
Nature plays a vital role in human health and well-being.

**BENEFITS TO MIND** (Healthy Parks, 2014)
- Cope & recover from stress
- Restore concentration
- Improve productivity
- Calming, restorative effect on children and adolescents with ADHD

**BENEFITS TO BODY** (Therese Rivasseau Jonveaux, et al)
- Recovery from illness quicker
- Fewer amount of pain medications
- Fosters recovery from mental fatigue
- Boosts immune system
- Increases life expectancy

**BENEFITS TO SPIRIT** (Maller, et al, 2005)
- Reduces depression
- Positive outlook on life
- Higher life satisfaction
- Beneficial physiological effects (ie increased happiness) when humans interact with animals, plants, & landscapes
1. Nature does play a vital role in human health and wellbeing!
1. Does nature play a vital role in human health & wellbeing?

2. Do humans have a deep emotional connection with nature?

3. Do healing gardens provide nature in our urban environment?
"...the innately emotional affiliation of human beings to other living organisms. Innate means hereditary and hence part of ultimate human nature."

E. O. Wilson
Author of Biophilia, 1984
Cross-disciplinary research

1. Horticulturist, research fellow and author of *Green Nature Human Nature* in 1996 explains the evolutionary basis of people-plant relationships and human responses to the environment. “People and plants are entwined by threads that reach back to the beginning of a species”....”emotional responses to nature setting are the psychic equivalent of body knowledge.”


2. Environmental Psychologists Rachel Kaplan and Steven Kaplan study human preferences for specific landscape configurations and identified 4 qualities humans use to determine preference: Coherence, Legibility, Complexity, Mystery.


3. Robert Ulrich, Ph.D., professor of architecture and landscape architecture at Texas A&M University and a pioneer of evidence-based design, measures physiological and pschophysiological responses (heart rate, blood pressure, muscle tension & brain waves) to preferred settings. Ulrich found 6 variables in qualities of landscape preference: Focality, Complexity, Depth, Ground Texture, Deflected Vistas, Appraised Threat.

2. Humans have a deep emotional connection with nature and is attracted to all that is alive and vital.
1. Does nature play a vital role in human health & wellbeing?

2. Do humans have a deep emotional connection with nature?

3. Do healing gardens provide nature in our urban environment?
ACCESS TO NATURE
Individual’s Role with Local Community in Health & Wellbeing

INGROUP (family & friends)

OUTGROUP (neighbors, co-workers, clubs, etc)

Access to Nature for Individual’s role in human health and well-being.

SOCIAL

INTERACTION

BENEFITS TO SOCIAL-SELF
(The Health and Social Benefits, 2005)
- Strengthens community ties
- Reduces crime
- Encourages volunteerism
- Promotes stewardship
- Promotes social bonds
3. Healing Gardens do provide nature in our urban environment.
<table>
<thead>
<tr>
<th>Design Principle</th>
<th>Banner Estrella</th>
<th>Banner Gateway</th>
<th>Banner Good Samaritan</th>
<th>Banner MD Anderson</th>
<th>Cancer Survivor’s Park</th>
<th>Elsie McCarthy’s Garden</th>
<th>Mercy Gilbert</th>
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**Design Principles vs Hospital Healing Gardens**
PHASE DEVELOPMENT MAP

PROPOSED DEVELOPMENT

PHASE 1: HEALING GARDEN
PHASE 2: PICNIC AREA
PHASE 3: CENTENNIAL TRAIL
PRELIMINARY DESIGN

Week of February 17, 2014
instinctual = mind
physiological = body
societal = spirit
12 BEST DESIGN PRINCIPLES

1. Simplicity is important | Empathize with the user’s need for clear pathways and intuitive cues.

2. Design should be reflective of the larger community | Holistic modeling; represent a larger feature in the landscape.

3. Design should encourage clarity of layout and movement | Avoid dead end paths and complex formations.

4. Design needs to have opportunities to make choices | Encourage interaction, offer contemplation or people watching areas.

5. Design should provide physiological comfort and psychological security | Create options of sun or shade, protection from breezes and others’ view.

6. Design needs to create physical opportunities for movement and exercise | This brings physical and emotional benefits and helps to combat depression.

7. Design should provide pleasing senses for the soul | Include elements of surprise, whimsy, variety in color, texture, size and massing.

8. Use the healing power of nature through sight, smell, touch and hearing | Increased plant-human interactions.

9. Provide carefully defined anchor points | Contemplative situations require a full sense of involvement with the surroundings.

10. Design should provide mystery and urge the visitor to explore | Garden elements should be revealed one at a time to not diminish the sense of discovery.

11. Design should encourage wildlife | Provide habitat and diversity of food in berries, seeds, nuts and nectars with seasons in mind.

12. Design should work with nature and natural forms | Avoid straight lines & planes, or excessive symmetry; Healing power of water as feminine energy.
VIEWS MAP
1. Looking southeast to southwest; Panorama outside EMRP Nature Center
2. Looking north across healing garden, toward tortoise pen
3. Looking east at EMRP Nature Center west facade
DESIGN PRINCIPLES ACHieved

- Clarity of layout and movement
- Opportunity to make choices
- Pleasing senses for spirit
- Healing power of nature
- Provides mystery
- Encourage wildlife
- Nature and natural forms

VIEW 1
Looking north across healing garden, toward the tortoise pen

**DESIGN PRINCIPLES ACHIEVED**

* P^7 Pleasing senses for spirit
* P^8 Healing power of nature
* P^11 Encourage wildlife
* P^12 Nature and natural forms
DESIGN PRINCIPLES ACHIEVED

P^3 Clarity of layout and movement
P^4 Opportunity to make choices
P^5 Physiological comfort and psychological security
P^9 Provides anchor point
P^11 Encourage wildlife interactions
Looking east at EMRP Nature Center west facade
## 12 Design Principles vs EMRP Site Plan

<table>
<thead>
<tr>
<th></th>
<th>CIRCULATION</th>
<th>PLANT LIST</th>
<th>SEATING</th>
<th>SPACE</th>
<th>VIEWS</th>
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<td>CLARITY OF LAYOUT</td>
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<td>OPPORTUNITY FOR CHOICES</td>
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<td>PHYSIOLOGICAL COMFORT</td>
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<td>DEFINED ANCHOR POINTS</td>
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<td>PROVIDE MYSTERY</td>
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<td>ENCOURAGE WILDLIFE</td>
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<td>NATURE &amp; NATURAL FORMS</td>
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### Healing Garden Plant List

**ESTRELLA MOUNTAIN REGIONAL PARK**

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<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Mature Size</th>
<th>Blooming Season</th>
<th>Reason for Selection</th>
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<tr>
<td><strong>Trees</strong></td>
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<tr>
<td>Acacia constricta</td>
<td>White Thorn Acacia</td>
<td>10x15</td>
<td>spring to summer</td>
<td>Attracts birds</td>
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<tr>
<td>Chilopsis linearis</td>
<td>Desert Willow</td>
<td>25x20</td>
<td>spring to fall</td>
<td>Attracts hummers</td>
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<td>Parkinsonia florida</td>
<td>Blue Palo Verde</td>
<td>30x30</td>
<td>spring</td>
<td>Good for nesting</td>
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<tr>
<td>Prosopis pubescens</td>
<td>Screwbean Mesquite</td>
<td>15x20</td>
<td>spring to fall</td>
<td>Attracts wildlife</td>
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<td><strong>Shrubs</strong></td>
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<tr>
<td>Calliandra eriophylla</td>
<td>Pink Fairy duster</td>
<td>3x4</td>
<td>spring to fall</td>
<td>Attracts hummers</td>
</tr>
<tr>
<td>Celtis pallida</td>
<td>Desert Hackberry</td>
<td>8x10</td>
<td>summer</td>
<td>Birds love orange berries</td>
</tr>
<tr>
<td>Encelia farinosa</td>
<td>Brittlebush</td>
<td>3x4</td>
<td>winter to spring</td>
<td>Attracts wildlife</td>
</tr>
<tr>
<td>Ericameria laricifolia</td>
<td>Turpentine Bush</td>
<td>2x3</td>
<td>late summer to fall</td>
<td>Attracts wildlife; fragrant</td>
</tr>
<tr>
<td>Justicia californica</td>
<td>Chuparosa</td>
<td>4x4</td>
<td>winter to spring</td>
<td>Attracts hummers</td>
</tr>
<tr>
<td>Larrea tridentate</td>
<td>Creosote</td>
<td>6x6</td>
<td>spring to fall</td>
<td>Attracts wildlife; fragrant</td>
</tr>
<tr>
<td>Lycium pallidum</td>
<td>Wolfberry</td>
<td>8x8</td>
<td>spring to fall</td>
<td>Attracts wildlife; fragrant</td>
</tr>
<tr>
<td>Simmondsia chinensis</td>
<td>Jojoba</td>
<td>6x6</td>
<td>spring</td>
<td>Attracts wildflower; medicinal</td>
</tr>
<tr>
<td>Tecoma stans</td>
<td>Arizona Yellow Bells</td>
<td>6x6</td>
<td>spring to fall</td>
<td>Attracts hummers &amp; butterflies</td>
</tr>
<tr>
<td><strong>Groundcover/Annuals/Perennials</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baileya multiradiata</td>
<td>Desert Marigold</td>
<td>1x1</td>
<td>year-round</td>
<td>Beautiful flowers year-round</td>
</tr>
<tr>
<td>Daucus pusillus</td>
<td>Rattlesnake Weed</td>
<td>2x1</td>
<td>spring</td>
<td>Attracts wildlife, medicinal, edible</td>
</tr>
<tr>
<td>Eriogonum fasciculatum</td>
<td>Wild Buckwheat</td>
<td>1x2</td>
<td>spring</td>
<td>Attracts birds, medicinal</td>
</tr>
<tr>
<td>Lupinus arizonicus</td>
<td>Arizona Lupine</td>
<td>3x3</td>
<td>spring</td>
<td>Beautiful flowers; sun-tracking</td>
</tr>
</tbody>
</table>

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Estrella Mountain Regional Park "rises gradually from approximately 900 feet above sea level to the highest point in the park of 4,512 feet." (D. Bates) This locates the park in the Lower Sonoran Zone which is 0-4500’. These plants endure extreme temperatures that exceed 110ºF in the summer and 25ºF during the winter, as well as precipitation of 6 inches or less annually.
Estrella Mountain Regional park "ris[es] gradually from approximately 900 feet above sea level to the highest point in the park of 4,512 feet." (D. Bates) This locates the park in the Lower Sonoran Zone which is 0-4500'. These plants endure extreme temperatures that exceed 110ºF in the summer and 25ºF during the winter, as well as, precipitation of 6 inches or less annually.

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Mature Size</th>
<th>Blooming Season</th>
<th>Reason for Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cactus/Succulents/Accent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agave murpheyi</td>
<td>Murphey’s Agave</td>
<td>5x4</td>
<td>Late winter to spring</td>
<td>Edible; material resource</td>
</tr>
<tr>
<td>Asclepias subulata</td>
<td>Desert Milkweed</td>
<td>3x3</td>
<td>Spring to fall</td>
<td>Attracts butterflies</td>
</tr>
<tr>
<td>Dasylirion wheeleri</td>
<td>Desert Spoon</td>
<td>4x4</td>
<td>Summer</td>
<td>Attracts wildlife; material resource</td>
</tr>
<tr>
<td>Fouquieria splendens</td>
<td>Ocotillo</td>
<td>24x18</td>
<td>Spring</td>
<td>Attracts hummers</td>
</tr>
<tr>
<td>Lophocereus schottii</td>
<td>Senita</td>
<td>10x10</td>
<td>Spring to summer</td>
<td>Edible fruit; material resource; spiritual</td>
</tr>
<tr>
<td>Opuntia acanthocarpa</td>
<td>Buckhorn Cholla</td>
<td>4x5</td>
<td>Spring</td>
<td>Edible fruit</td>
</tr>
<tr>
<td>Opuntia basilaris</td>
<td>Beavertail Prickly Pear</td>
<td>1x3</td>
<td>Spring</td>
<td>Beautiful flowers; edible fruit</td>
</tr>
<tr>
<td>Yucca elata</td>
<td>Soaptree Yucca</td>
<td>10x4</td>
<td>Spring to summer</td>
<td>Attracts wildlife, medicinal, edible</td>
</tr>
</tbody>
</table>
PLANT PALETTE

Blue Palo Verde

Desert Willow

Screwbean Mesquite

White Thorn Acacia

Desert Marigold

Rattlesnake Weed

Wild Buckwheat

Arizona Lupine
Buckhorn Cholla

Desert Milkweed

Desert Spoon

Ocotillo

Parry's Agave

Purple Prickly Pear

Senita

Soaptree Yucca

PLANT PALETTE (cont)
TAKE-AWAYS

1. Nature IS vital to our health and wellbeing...and should be designed into our lives.

2. There are multiple BENEFITS to the mind-body-spirit of individuals that spend time in and around Healing Gardens.

3. Healing Gardens are a BEST PRACTICE for anyone that wants health & happiness.

4. Healing Gardens can be created ANYWHERE and be ANY SIZE.
“Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and give strength to body and soul.”

~John Muir~