



HEALING GARDENS

Gardening for Health
and Serenity

When 300 people were asked to visualize “ an environment that would be healing for a wounded person” every one of them envisioned nature (Olds 1985)



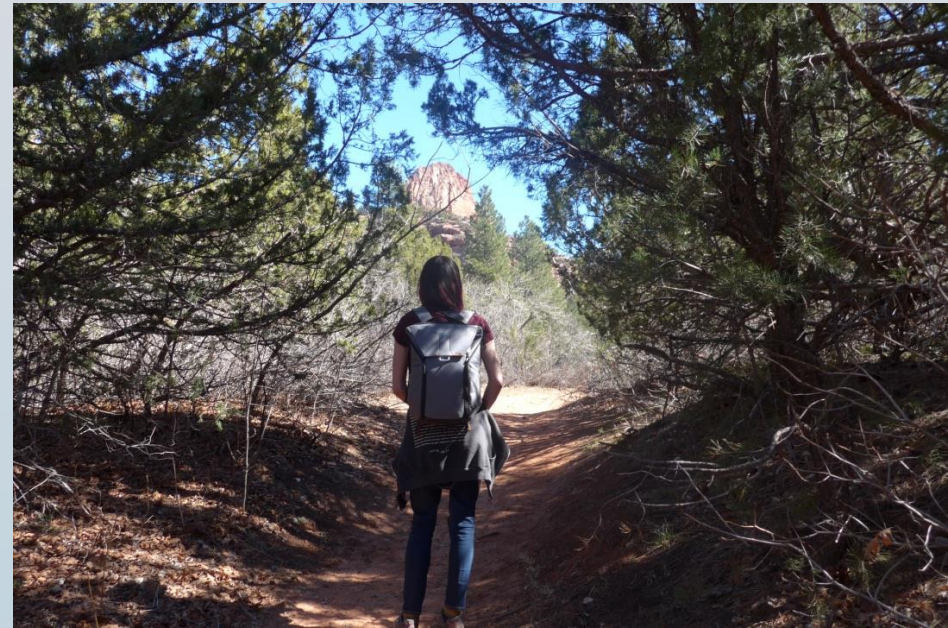
Why is nature healing

- Current lifestyles contribute to stress (technology, nutrition)
- Increased stress leads to mental fatigue (irritability, impatience, inability to step back, impulsiveness)
- Stress is reduced through **restorative experiences**



What is a “restorative” experience

- *Promotes renewal, reawakening of physical and psychological capabilities diminished or lost in the ongoing stresses and pressures of living in society*
- *Opportunities to clear one's head in order to reflect on issues of personal interest*



Number 1 Restorative Environment

*Theories demonstrate that
nature reduces stress and
increases well being
providing the restorative
experiences*



Healing Gardens

“been around for a while”

- *Ancient Egyptian physicians prescribed walks around a garden for patients with mental illness*
- *Middle Ages, monasteries used plants with the express purpose of cheering up melancholy patients*
- *Florence Nightingale in *Notes on Nursing* in 1860 wrote that visual connections to nature, such as natural scenes through window and bedside flowers, aid the recovery of patients ([Nightingale, 1863](#)).*
- *Benjamin Rush, a signer of the Declaration of Independence, discovered that working in farm setting helped attain positive outcomes for clients with mental illness*
- *During World Wars I and II, VA hospitals used horticulture to improve soldiers' functioning of injured limbs and increase mental function, and also to teach them new skills and to grow food*

Healing Gardens

<https://www.ahta.org>

- Healing gardens are plant dominated environments including green plants, flowers, water, and other aspects of nature.
- They are generally associated with hospitals and other healthcare settings, designated as healing gardens by the facility, accessible to all, and designed to have beneficial effects on most users.
- A healing garden is designed as a retreat and a place of respite for clients, visitors, and staff

Healing through Gardens



- Gardens heal through acknowledging the degree to which our physical and emotional balance is restored through nature
- Connections to nature gives meaning to one's life—hope, potential, fulfillment
- Nature connects to cycle and rhythms of life
- Working with nature brings peace and harmony
- Watching growth brings a reason for tomorrow
- Helps us be in present

Types of healing gardens

- These garden types are likely to have overlap since no two gardens are the same.
- Therapeutic gardens,
- Horticultural therapy gardens
- Restorative gardens.



Therapeutic horticulture garden

- Designed to meet needs of a specific population
- Designed to support primarily horticultural activities.
- Designed in such a manner that the clients themselves are able to take care of plant material in the garden.



A restoration or meditation garden

- This type of garden employs the restorative value of nature
- Provides an environment conducive to mental repose, stress reduction, emotional recovery and the enhancement of physical and mental energy
- Public or private garden that is not necessarily associated with a healthcare setting.



Commonalities



- *Stress reduction*
- *Improve well being*
- *Reduce improve physical health and give relief physical symptoms*

Stress Reduction Theory

Roger Ulrich



1. Sense of control and privacy

- Lack of control=helplessness=stress
- Less stress=better health
- Lack of privacy is environmental stress
- Gardens provide a temporarily means of physical (active) or mental (passive) escape from a stressful environment
- Being away real or perceived gives sense of control

Garden design considerations

Control and Privacy

- Know it exists , preferably adjacent to building
- Be involved in design
- Able to use in ways preferred
- Private while ensuring safety
- Large enough not to feel crowded
- Accessibility people with physical challenges



2. Social Support



- *Interactions that elicit a sense of belonging*
- *People who have social support are less stressed and have better health outcomes (Ulrich, 1995)*
- *Social Support acts like a buffer for stress and depression*

Gardens Facilitate Social Interactions

- *Non- threatening, pleasant place to meet with family, friends, health professionals*
- *Addition of therapeutic horticulture activities even more so: interactions with counselor and other clients*
- *Socially acceptable activities*
- *Allows one to interact in a non threatening way to others with similar interests*
- *Interests lead to friendships*
- *Friendships lead to a sense of place in the community*

Garden Design Considerations

Social Support

■ ***Enclosed Settings***

- *Settings conducive to small groups*
- *little nooks, moveable seats archways*
- *Larger settings considerate of privacy for social support groups*
- *Cultural consideration for extended families*



Balance

■ Open settings

- *Passive and private activities*
- *Sitting, viewing scenery or watching others*
- *Meditation*
- *Gardening activities*



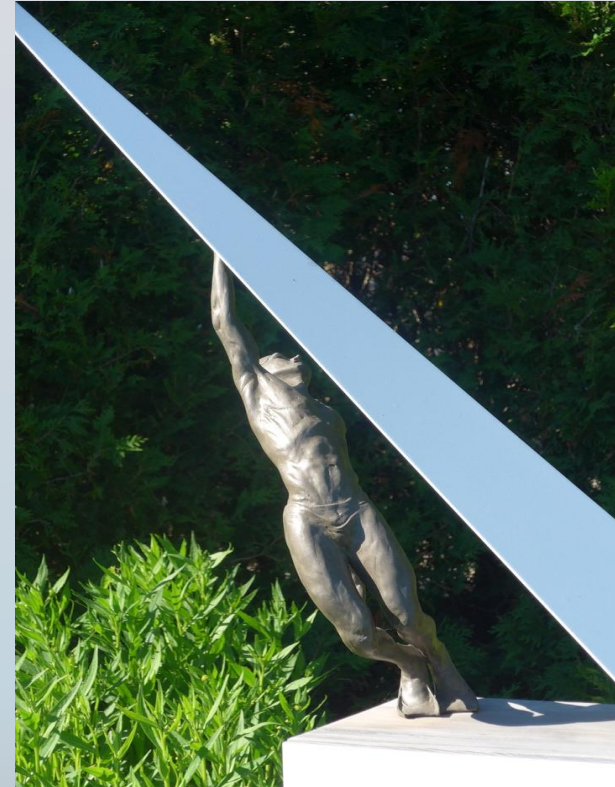
3. Physical Movement and Exercise



- *A garden or even a view may encourage someone to go outdoors*
- *Exercise has both physical and emotional benefits*
- *Even mild movement reduces stress and depression*

Physical Benefits of Gardening

- *Self paced exercise*
 - *Working within one's ability allows for a better chance of increasing strength*
- *Movement builds awareness and confidence in body*
- *Air and sun contribute to feelings of wellness*



Emotional Benefits

Improves Mood

- *Sunlight increases good chemicals like serotonin and dopamine*
- *Mycobacterium vaccae in soil can increase serotonin*
- *S.A.D. morning walks*

Relieves Stress

- *Being outside makes it easier for your body to regulate cortisol which is linked to stress, as well as melatonin*
- *Channels stress into productivity*
- *Mindfulness*

Security Fitting in



- *Provides real activities that meet the needs of individuals without being demeaning or inappropriate for their age*
- *Establishes an idea of ownership and “place” in an area that is familiar and comfortable*

Garden Consideration

Physical Movement and Exercise

- Consider your user: what is good for one is not for another
- Facilitate accessibility
 - *Paths and walking loops*
 - *Handrails*
 - *Level, non skid surface*
- Benches and shade to rest
- Incorporate planter and tables for horticulture activities



4. Natural Distractions



- *Fascination is involuntary*
- *Frees one from negative thinking and lowers psychological symptoms*
- *Allows the mind and body to unwind and supports a meditative mood*
- *Relaxed states are easier to reflect on concerns and plan solutions*
- *Nature is full of fascination*

Garden Design Considerations

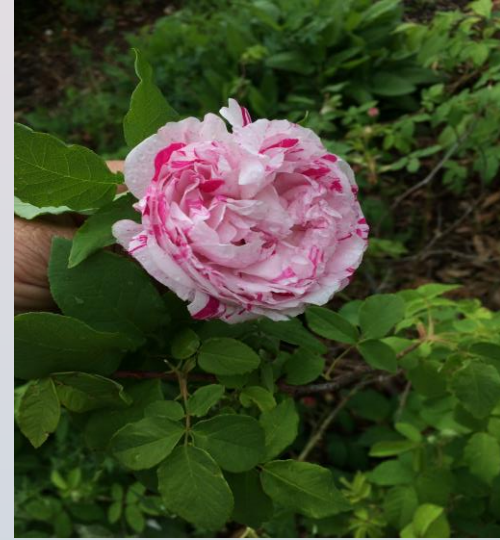
Natural Distractions

- Focus on what users want and not what pleases your personal tastes
- Discourage rigidity, conceptual thinking and preconceived notions of design (Allen Stark)
- Identified boundaries
- Lush vegetation: variety of plants, trees, greenery
- Flowers #1 choice
- Water features, elements of surprise and whimsy



Plant for the Senses

- A sensory garden is a self contained garden area that allows one to enjoy a wide variety of sensory experiences



- Color : effects mood
- Smell: evokes memory, effects mood
- Touch: soothing, enjoyment , delight
- Sound, soothing, evokes childhood memories
- Tastes : a variety

Healing Gardens

*Applications for
special needs*



Individuals with aging (85+) and physical limitations: gardening becomes more physically challenging- flexibility, strength, illness

■ ***Gardening Benefits***

- *Physical strength*
- *Increase mental alertness*
- *Socialization and Social Support*
- *Improve mood/ reduce stress*
- *Mindfulness connections*

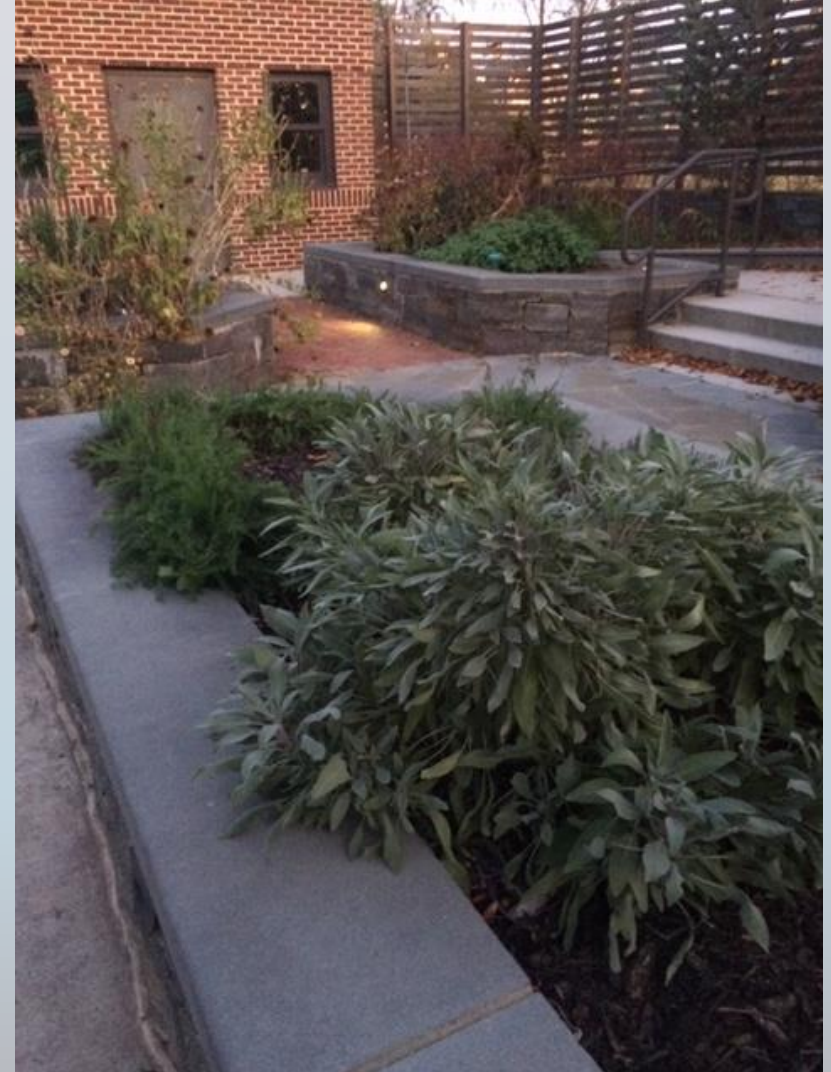


Gardening Design Considerations

- Provide culturally appropriate homelike environment(rocking chairs, porches, clotheslines)
- Balance between privacy and social
- Variety of spaces and furniture
- Comfortable space protected from wind and sun
- Sensory stimulation for mental alertness inside and outside
- Outdoor activities (raised beds, walking paths)
- Accessibility

Accessibility

- Base on gardeners strength fist and then limitations
- Contrasting colors between planting and paths to help depth perception
- Raised beds high enough to eliminate bending over, edges around bed high enough to sit
- Ensure legroom for wheelchair (can use sturdy benches, tables, sawhorses anything at waist level



Design Consideration Visual Impairments

- Use primary colored and white plants with large flowers and leaves
- Group plants
- Use tools with bright handles (yellow)
- Wind chimes to orient
- Sensory gardens



Gardening for Life

<https://s3.wp.wsu.edu/uploads/sites/2079/2015/12/GFL-booklet-complete.pdf>

- In vegetable garden, plant crops in straight rows
- Tie a rope of cord with evenly spaced knot and stretch the rope between two stakes
- The knots will indicate the placements of transplants
- Anything outside can be considered a weed and pulled

Dementia Wander Gardens

“ safe, secure, outdoors environments”



Individuals with dementia who have access to gardens are less likely to display aggression or experience injuries as well as improved sleep patterns, balanced hormones and decreased agitation.

(Mooney and nicely, 1992. the importance of exterior environment for Alzheimer's residents. Healthcare management forum)

Dementia: Gardening Considerations

- **Security:** *fencing but not transparent, low planting for line of sight*
- **Safety:** *non toxic plants, handrails, bathroom access*
- **Orientation:** *non verbal orientation cues, seating, pergola*
- **Orientation to Time and Place:** *seasonal and heirloom planting , memory recall potting sheds*
- **Cultural memories:** *awareness of individuals culture (natural, Zen plaza)*
- **Pathways:** *simples loops, figure 8, walking paths wide enough for 3 across, level no dead ends, no glare, and smooth*
- **Connection** *between indoor and outdoor*

Individuals with Behavioral Health issues Mental Health/Substance Abuse

■ Benefit Focus

- *Physical exercise*
- *Stress reduction*
- *Mood enhancement*
- *Improve functional skills*
- *Security/fitting in*
- *Mindfulness/meaningful connections*

Garden considerations



- *Offer shade/ Be aware of photosensitivity/Avoid toxic plants*
- *No hidden corners, line of sight*
- *Keep in mind how material may be perceived: individuals might be more sensitive to patterns ,shapes, textures, ambiguity and abstract elements*
- *Garden scale (too big, too small)*

Therapeutic Landscapes: An Evidence-Based Approach to Designing Healing Gardens and Restorative Outdoor Spaces 1st Edition by [Clare Cooper Marcus](#) (Author), [Naomi A Sachs](#) (Author)

Healing Gardens: therapeutic benefits and design recommendations. Clare Cooper Marcus (author) and Marnie Barnes (author)

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