

Sensory Gardens¹

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Gardens are designed to stimulate the senses. Some gardens stimulate the senses to a greater degree than others. In sensory gardens, plants and other design elements are selected with the intention of providing experiences for heightened sight, smell, hearing, touch, and taste.

Some sensory gardens are devoted specifically to one sense, such as a fragrance garden. Others may focus on several senses, with separate sections devoted to each sense. A third approach is a blend that addresses all of the senses.

Designing the Sensory Garden

Well-designed sensory gardens can be simultaneously stimulating and relaxing. They can be created in spaces that are small or large, private or public.

Sensory gardens can serve many functions, such as teaching, socializing, healing, and horticultural therapy.

The ill or weakened can be enlivened and renewed physically, mentally, or spiritually by sensory gardens. Individuals with impairment of one or more of their five senses may find special enjoyment because they may have enhanced perception in their other senses. When designing gardens for individuals with special needs, they should be consulted to ensure their specific needs are met.

Gardens with a variety of sensory elements are particularly effective in association with health care facilities such as nursing homes and hospitals, as well as schools, parks, and botanic gardens. The audiences and objectives for every sensory garden may vary; however, a number of design considerations are common to all.

Hardscape Elements

Hardscape elements are the components of the landscape not composed of living plants—paths, benches, arbors, walls, etc. Paving materials for garden paths can vary throughout the garden to provide desirable challenges for wheelchair users. Block paving, timber decking, mulch, and stone are some options, but they may

become slippery when wet. Pathway width should be a minimum of 36 inches, with an ideal of 60 inches for wheelchair access. No more than 30% of the total trail length may exceed a running slope of 8.33%. Wherever possible, trails should be designed on more level terrain to maintain minimum design guidelines for grade and avoid the need for switchbacks.

Raised planting beds can provide easy access to plants for all garden users and are especially helpful for the visually impaired and wheelchair users. Beds placed at lower heights that are comfortable for children will encourage them to explore the plantings.

Seating in the sensory garden should be placed strategically for functionality and to maximize enjoyment of the space. Seating can be an opportunity for sensory experience. Consider the options, from grouping a circle of large, rough-textured tree stumps, to placing a smooth metal bench that becomes warm or cool depending on the position of the sun. Seating with pergolas and gazebos also can incorporate fragrant plants.

Signage is a key element of a sensory garden. Visitors will be more inclined to interact with plants if they are prompted by clear labeling. One approach is to use color-coded signage that highlights the different senses associated with each plant. Braille plant labels placed at accessible locations, such as the back of a handrail, are typically used in gardens for the visually impaired. A recorded audio system can provide information to the visually impaired who do not read Braille. A sensory garden brochure with photographs and a plant list can serve as a guide during the garden visit and as a take-home educational piece.

Plant Selection

As in designing any garden, plants should be selected that will thrive in the environment particular to each garden. An objective in sensory garden design is to encourage users to interact with the plants, often directly, by breaking off leaves to smell or taste. Therefore, avoid

plants that are poisonous, allergenic, or are likely to require pesticide applications.

Some plant species can serve multiple roles in a sensory garden. For example, mints provide both scent and taste opportunities.

Plantings arranged in themed designs can engage garden users and elicit memorable experiences. Popular themes include plants from different regions of the world or cultures, moonlight gardens, and medicinal plants.

Sight

Color, visual texture, form, movement, light, and shadow stimulate the sense of sight. Contrasts of these elements add to the sensory experience.

Color provides a visual stimulus while adding order and balance, unity, rhythm, focal points, accents, and definition to a garden. Warm colors, such as red, orange, and yellow, tend to promote activity while cool colors, such as blue, purple, and white, tend to be soothing and promote tranquility. Flowers are a traditional, effective way to add color. Colorful fruits, foliage, and bark can also significantly enhance a garden's visual appeal.

The visual elements of the garden ordinarily would not be designed with the visually impaired in mind. Partially sighted persons, however, may be able to perceive large blocks of color. This factor may be considered in the design of some hardscape components and planting beds.

Plants with interesting visual texture add to the sensory garden experience. Excellent additions for sensory gardens include smooth, rough, ruffled, fuzzy, or lacey-textured plants. The overall texture of a plant is another consideration. For example, a fine-textured plant has small leaves and a somewhat sparse appearance, while a coarse-textured plant has large leaves and a fuller appearance.

Plants come in many forms, including upright, open, weeping, cascading, or columnar. Individual parts of plants, such as leaves or fruit, have their own forms, such as round, toothed, and spherical.

Movement can be added to the garden in a number of ways. Some examples include plants that sway in the wind, moving water features, pools with floating leaves or flowers, fish in ponds, butterflies, and birds. A sensation of movement can be achieved by designing planting beds so that the eye is drawn through a sequence of focal points and vistas.

Light and shadow are often overlooked but are visually important elements in sensory gardens, especially when held in contrast. Possibilities for contrast range from subtle, such as dappled sunlight through a shade tree, to dramatic, such as a dark tunnel of willow or vines that leads to an area of full sun.

Accessories for enhancing visual pleasure include color flood lights, torches, mirrors, and gazing globes. Mobiles and sculptures can add visual stimuli.

Sound

Opening the ears in a garden expands the senses and broadens the garden encounter. Opportunities can be provided in a sensory garden for sitting under a tree to hear the sound of wind rushing through the leaves. Many plants offer sounds with a small amount of wind or jostling: bamboo stems knock together, grasses rustle, palm fronds sway. Seed pods of some plants make natural maracas, or rattles. Leaves can be left on the ground to crunch underfoot.

Sounds of animals enliven the senses. Oak trees can host squirrels that chatter and scramble. Birdsongs can fill the garden if bird baths, bird-attracting plants, bird feeders, and bird houses are provided and maintained.

Accessories for bringing sounds to the garden include waterfalls, fountains, water harps, wind chimes, and music piped in through outdoor speakers.

Smell

The sense of smell is deeply emotional and associative. Scent in the garden can create a lasting sensory experience. This can be especially meaningful for the visually impaired. A fragrance can evoke long-buried memories. Crushing and smelling a plant part is also a classic method of plant recognition and identification.

With thoughtful planning and design, it is not difficult to incorporate into a garden the fragrances of delicate nasturtium blossoms, the heady perfume of gardenia, or the resinous scent of pine needles. Many edible species also have strong fragrance, such as tomatoes, citrus, and herbs and spices.

Some plants release their fragrance into the air with the heat of the sun, while others release their scent only when crushed. If the garden will be used in the evening, include plants that release their fragrance at night, such as confederate jasmine.

Place fragrant plants near garden seating to create a natural combination. Relaxing with a variety of scented plants at hand to enjoy is a simple pleasure. Plants in large pots placed along the garden paths can be brushed and touched without stooping. When fragrant creeping herbs, such as thyme, are planted among pathways, walking or wheeling on them will release their aroma.

The timing of garden maintenance activities should be considered for their effect on scents in the air. For example, the smell of lawn mower exhaust is unappealing to most, but the fragrance of freshly cut grass is pleasing to many people. Mowing turf areas shortly before garden users arrive would address this issue.

Incense and scented oils in garden torches are among the accessories that contribute scent to the sensory garden.

Touch

In a sensory garden, people should be encouraged to touch plants. Plants should be chosen that are durable enough to withstand frequent brushing or handling.

Tactile delights can be found in soft flowers, fuzzy leaves, springy moss, rough bark, succulent leaves, and prickly seed pods. Even sticky fruit and gooey plant saps can stimulate the sense of touch and give children an educational thrill.

Some species offer a variety of textures within a single plant. A classic example is the rose, with its delicate petals and thorny stems. Others include silver buttonwood, with its rough bark and soft grey leaves, or southern magnolia, with its leaves slick, shiny, and dark green above, and soft, felted brown beneath.

Plants that may be dangerous to the visually impaired, such as spiny agaves or roses, need not be excluded from the sensory garden. Design can accommodate these plants by placing them out of accidental reach, toward the back of planting beds.

An excellent addition to a touch garden is a lawn where people can lie down. Water features within reach, with water lilies and other aquatic plants to touch, also provide tactile experiences.

Garden accessories that stimulate the sense of touch include outdoor misting machines and sculptures.

Taste

In a sensory garden, the taste buds can tingle from edible fruits, vegetables, herbs, and spices. To ensure that

everyone gets a taste, include plants that can produce a large number of edible parts over time, such as mint leaves, strawberries, or edible flowers, rather than species with more limited production, such as cantaloupe.

Including plants that can be tasted in the sensory garden provides teaching opportunities in edible landscaping, agriculture, and nutrition. It also is an excellent way to share memories and evoke cultural exchange over food plants.

Providing space for food preparation, cooking, and eating brings taste directly to the garden. This can be accomplished simply with an outdoor barbecue grill and a picnic table in the shade. A small pavilion for preparing herbal tea from the garden is also a wonderful addition.

Additional Reading

Color By Design. Pope, Nori, et al. 1998. SOMA Books.

The Complete Book of Edible Landscaping: Home Landscaping with Food-Bearing Plants and Resource-Saving Techniques. Rosalind Creasy. 1982. Sierra Club Books.

Continuous Color. Pam Duthie. 2004 Ball Publishing.

Edible Garden. Editors of Sunset Books. 2004. Oxmoor House.

Fragrant Designs. Beth Hanson (editor). 2009. Brooklyn Botanic Garden.

Fragrant Gardening. Bradley, Steve, et al. 2003. Laurel Glen.

Healing Garden: A Natural Haven for Body, Senses, and Spirit. Minter, Sue. 1996. Charles E. Tuttle Co., Inc.

Healing Gardens. Rawlings, Romy. 1999. Willow Creek Press.

The Herb Bible: a complete guide to growing and using herbs. Jennie Harding. 2005. Parragon.

Landscaping with Herbs. James Adams. 1987. Timber Press.

Malcolm Hillier's Color Gardening. Hillier, Malcolm, et al. 1999. DK Publishing.

Therapeutic Landscapes: An Evidence Based Approach to Designing Healing Gardens and Restorative Outdoor Spaces. Marcus and Sachs. 2014. Wiley and Sons Inc.

Therapeutic Gardens Design for Healing Spaces. Winterbottom and Wagnefield. 2015. Timber Press Inc.

Water Features for Small Gardens: From Concept to Construction. Keith Davitt. 2003. Timber Press.

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