

**CATEGORY: LANDSCAPES FOR HEALTH: DESIGNED LANDSCAPES**

## **Sensory Gardens**

Sensory gardens are emerging in multiple sectors including healthcare facilities, school gardens, public gardens and memory care gardens. Design principles and strategies for sensory gardens distinguish between other types of gardens, all of which can provide sensory engagement, but it is the intentional focus on elevating senses in this type of garden while incorporating the eight sensory systems (sight, sound, hearing, tasting, vestibular balance, interoception and proprioception) (Elbasyoni et al., 2023; Pouya et al., 2024). This includes providing a range of experiences including positive sensory engagement while allowing for avoidance of sensation for some. Sensory gardens seek to provide a setting where balanced sensory inputs and experiences is possible, allowing for options to participate or not. Sensory gardens seek to be inclusive, knowing that visitors may have intolerance or overstimulation to sensory stimuli.

Sensory experiences, specifically challenges with sensory processing are often identified with children and people who are neurodivergent. While these individuals and populations can benefit from sensory gardens, and therapeutic goals are probably incorporated into design and plant selection, sensory gardens can be much broader and diversified than this. New research is examining how different populations can benefit from sensory experiences in garden settings.

Understanding sensory inputs, multi-sensory experiences, and self-regulation provide the foundation for designing, and using sensory gardens. How people experience sensations is the backbone of sensory gardens, noting that each person will experience them differently. Some individuals and populations share common sensory responses, some with well-integrated sensory systems, others with strong sensory challenges or processing disorders, preferences and tolerances (Ayres, 1979). Some people seek sensory experiences where craving sensory inputs cannot be satisfied, this referred to as hyposensitivity, with the opposite – hypersensitivity, or the inability to tolerate sensory inputs. All of these are based on an individual’s ability to receive, process and respond to multiple sensory inputs using several biological systems (Fleming et al., 2023).

Sensory garden design includes physical accessibility as well as “alerting and calming spaces”, transitional spaces, and wayfinding signage labelling sensory experiences (Wagenfeld, 2025). Providing a variety of experiences is important.

**For related resources refer to Landscapes for Health category: designed landscape elements; therapeutic gardens; urban green spaces; and Horticultural Therapy & Health Services category: horticultural therapy.**

### **Key Organizations**

*American Society of Landscape Architects* – [Healthcare and Therapeutic Design Professional Practice Networks](#)

[Children & Nature Network](#)

[KidsGardening](#)

[Star Institute Sensory Processing Health and Wellness](#) - (Mission: To impact quality of life by

developing and promoting best practices for sensory health and wellness through treatment, education, and research).

[Therapeutic Landscapes Network](#)

[The Center for Health Design](#)

[Quiet Parks International \(QPI\)](#)

### **Books, journals & epublications on sensory gardens**

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Grace, J. (2022). *Sensory stories: Making narratives accessible through the senses*. Jessica Kingsley Publishers.

Mottola, A. (2017). *What do you sense in the garden?* The New York Botanical Garden Press.

Tate, A., & Eaton, M. (2023). *Designed landscapes: 37 key projects*. Taylor & Francis.

Wagenfeld, A. (2025). [Youth sensory gardening manual](#). American Horticultural Society.

### **Research & articles on sensory gardens**

Recently published selected research & articles:

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American Society of Landscape Architects. (2021). [Universal design](#).

American Society of Landscape Architects. (2021). [Universal design: Gardens](#).

Biglin, J. (2020). Embodied and sensory experiences of therapeutic space: Refugee place-making within an urban allotment. *Health Place*, 62, 102309.

Collins, H., Van Puymbroeck, M., Hawkins, B.L., & Vidotto, J. (2020). The impact of a sensory garden for people with dementia. *Therapeutic Recreation Journal*, 54(1).

Elbasyoni, M.E.M., & Gammaz, S.A. (2023). A qualitative therapeutic design approach for sensory garden design for people with dementia. *Civ Eng Archit*, 11, 2110-2122.

Eraslan, S., & Akyyev, A. (2022). Design clues for a sensory garden. *Online Journal of Art & Design*, 10(3).

Feldman, M.J., Bliss-Moreau, E., & Lindquist, K.A. (2024). The neurobiology of interoception and affect. *Trends in Cognitive Sciences*.

Ferrentino, A., Rius, C., Pairó, R.T., & Ramírez, E.G. (2024). The Garden of the Senses. *ARCH24 Design for Health and Wellbeing*, 32.

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Fury, E. (2025). [Sensory gardens for students with visual and multiple impairments: Cultivating inclusive learning environments](#). *Paths to Literacy*.

Grimes, K. (2025). [Therapeutic activities for youth sensory gardens](#). *Cultivate*, 5(4).

Gülgün, B., Öztürk, İ., & Yazıcı, K. (2020, July). Sensory gardens: Design criteria and case studies. *International Symposium for Environmental Science and Engineering Research*.

Haag, B., & Fisher, M. (2024). [How to create a sensory garden](#). Illinois Extension University of Illinois Urbana-Champaign.edu.

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- Huang, Y., & Yuan, X. (2024). Smellscape as a healing factor in institutional gardens to enhance health and well-being for older people with dementia: A scoping review. *Journal of Clinical Nursing*, 33(2).
- Hussein, H., Omar, Z., Amano, J., & Zakaria, A. (2022). Therapeutic sensory stimulation garden for a residential care facility, Nozomi-No-Sato, Japan. *Journal of Architecture, Planning and Construction Management*, 12(2), 27-39.
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- Ilvitskaya, S.V., & Kasper, N.V. (2022). Sensory garden as a perspective type of space for habilitation of young children. In *Architectural, construction, environmental and digital technologies for future cities: Experience and challenges from Russian cities* (pp. 213-223). Springer International Publishing.
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- Moser, S. (2023). The garden visitor experience: Multisensory meaning making in designed landscapes. *Museum Management and Curatorship*, 38(6), 679-695.
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### **Examples of sensory gardens**

Autism Together video on its *Sensory Garden*, UK demonstrates features of their sensory garden with experiences outdoors, using soft paths, a musical area, swing, sunshade, soft sensory sofas, color panels, and textured panels.

<https://www.youtube.com/watch?v=JQM2C4LBlal>

Botanica Garden in Wichita, Kansas is planning a barefoot sensory garden according to its website, in addition to its *Sally Stone Sensory Garden*, garden on the rocks, and woodland walk, incorporating several topographical features into the public garden.

<https://botanica.org/>

Denver Art Museum *Sensory Garden* uses 3 hubs of water, wood and sky for visitor experiences.

<https://www.denverartmuseum.org/en/blog/sensory-garden-planting-design>

Edgerton WI Hospital and its Health Services *Healing Garden* uses fragrant plants as the backbone of the healing process based on smellscape studies, with plants lemon verbena, pine scented geranium, valerian, viburnum Spiced Bouquet, mock orange, and popcorn cassia. Access to the garden is available at night and during the day.

<https://www.edgertonhospital.com/health-wellness/healing-garden/>

Lerner *Garden of the Five Senses*, at Coastal Maine Botanical Gardens is planted with species that offer touch, sight, sound, taste and auditory experiences as well as a reflexology labyrinth.

<https://www.mainegardens.org/gardens/gardens-key-features/>

Missouri Botanical Garden and its Zimmerman *Sensory Garden* engage the senses offering an immersive sensory experience for all visitors. It offers therapeutic horticulture programs as well.

<https://www.missouribotanicalgarden.org/learn-discover/therapeutic-horticulture/zimmerman-sensory-garden>

*Outdoor Learning Station: Sensory Garden*, with suggestions from Alabama Wildlife Federation includes activities, resources and the idea of adopting a sensory garden where students would assist in maintaining the garden.

<https://alabamawildlife.org/learn-about-your-senses-old/>

Portland Japanese Garden in Oregon suggests ways to experience the garden, enjoy a restorative time, and participate in special events like Kintsugi – the restorative art of Naoko Fukumaru.

<https://japanesegarden.org/>

<https://www.psychologytoday.com/us/blog/the-art-now/201712/the-japanese-garden-place-refuge>

St Mary's Hospital for Children in Bayside NY uses a sensory garden for programming and health interventions with children with special needs.

<https://www.stmaryskids.org/sensory-garden/>

### **Videos, webinars & websites on sensory gardens**

*Eight Senses Hardscape Considerations* chart in Wagenfeld, A. (2025). *Youth sensory gardening manual*.

On page 58/61 the worksheet identifies the senses with suggested factors for creating a sensory garden. [AHS-Youth-Sensory-Gardening-Manual.pdf](#)

Garden Design.com provides design ideas for creating and engaging senses in gardens including sight, smell, taste, touch and sound.

<https://www.gardendesign.com/landscape-design/senses.html>

*Indoor Supplies for a Sensory Garden Program and Basic Outdoor Garden Tools for sensory programs*, part of the [Youth Sensory Gardening Manual](#). Working document for planning purposes.

Hamilton Health Science's restorative outdoor gardens, at its multiple locations, were designed and installed for use by patients, staff, families, and the public. They include a gazebo, courtyard, playground, patios and more.

<https://www.hamiltonhealthsciences.ca/share/outdoor-spaces/>

Honey Bees, a downloadable learning and sensory activity guide for students of Overbrook School for the Blind, is relevant for all populations and ages.

<https://www.phillyorchards.org/wp-content/uploads/2018/11/Honeybee-Sensory-Lesson-Book.pdf>

Kenny Rogers Children's Center Sensory Garden video is a 4000 sq ft play area, therapeutic delivery site, with therapeutic goals related to sensory integration and socialization.

<https://www.youtube.com/watch?v=1fYxyP-ERCo>

Kids Gardening provides a downloadable resource for *Designing a Sensory Garden* with materials list, instructions, themes, accessories, plants and safety tips.

<https://kidsgardening.org/resources/garden-activities-designing-a-sensory-garden/>

Kids Gardening downloadable *Engaging Sensory Systems in the Garden* discusses the senses in terms of experiences for children in gardens.

<https://kidsgardening.org/resources/digging-deeper-engaging-sensory-systems/>

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Kids Gardening page *Sensory Garden Plants* identifies plants that provide sensory experiences, organized by senses, types of plants, with photos.

<https://kidsgardening.org/resources/growing-guide-sensory-garden-plants/>

Kids Gardening lesson plan – *Growing a Knowing Nose – A Scent Lesson* written for grades 3-5 suggests exploration of plants, fragrances and emotions related to them.

<https://kidsgardening.org/resources/lesson-plan-growing-a-knowing-nose-scent-lesson/>

*Milton Hershey School's Sensory Garden* youtube video includes children's comments and experiences.

<https://www.youtube.com/watch?v=pvlsbp98KSI>

Morton Arboretum lists outdoor proprioceptive activities.

<https://mortonarb.org/app/uploads/2022/06/Outdoor-Proprioceptive-Activities.pdf>

NoiseAwareness.org. (2024) identifies auditory points of reference measured in decibels.

<https://noiseawareness.org/info-center/common-noise-levels/>

*Seattle Children's Playgarden* website resources include lesson - *Gardening with Kids with Sensory Sensitivities*.

<https://seattleplaygarden.org/portfolio/gardening-with-kids-with-sensory-sensitivities/>

*Sensory Garden: Sight – Visual Interest in the Garden* webinar from Trellis Scotland; speaker Joan Wilson shares insights into engaging nature in a garden setting using eyes, visual interest and visual perception.

<https://www.youtube.com/watch?v=ndtDibtkuxM>

*Sensory Overload* documentary on Hulu, discusses neurodivergence and sensory sensitivities with Dr. Virginia Spielmann.

<https://sensoryhealth.org/node/2087>

Sensory Trust in the UK. downloadable online document *Sensory gardens – Design Guide* includes features offering comfort, accessibility, color, movement, and experiences with the five senses.

<https://www.sensorytrust.org.uk/resources/guidance/sensory-gardens-design-guide>

THAD (Therapeutic Horticulture Activity Database) offers 300+TH activities across populations, tested by practitioners with a range of populations, some with a specific focus on sensory activities (sensory activities: [Georgia Red Clay Soil: A Sense of Place](#), [Polka Dot Plant Propagation](#), [Orange Pomanders](#), [Easter Basket with Ryegrass](#), [Sounds from Gardening](#), [Therapeutic Nature Journaling](#)).

<https://hos.ifas.ufl.edu/therapeutic-horticulture-activities-database/>

*The Universal Garden* website from *Americans with Disabilities Act National Network* introduces important concepts for universal gardens using universal design principles including examples.

<https://adata.org/universal-garden>

University of Florida|IFAS Extension's *Sensory Gardens* epublication provides ideas for teaching, socializing, therapy and personal gardens including plant recommendations.

<https://gardeningsolutions.ifas.ufl.edu/design/types-of-gardens/sensory-gardens/>

University of Florida|IFAS Extension's *Sensory Gardens* epublication *Fragrance Gardens* identifies fragrant plants with links to UF plant publications.

<https://gardeningsolutions.ifas.ufl.edu/design/types-of-gardens/fragrance-gardens/>

*Sensory-based nature activities*: A full deck of ideas written by A. Wagenfeld in 2024.  
<https://kidsgardening.org/product/sensory-based-nature-activities/>

*Your Sensory Health Matters. Here's Why* is a TEDX Talk delivered by Dr. Virginia Spielmann., known for her work in neurological processing, occupational therapy and sensory processing.  
[https://www.ted.com/talks/your\\_sensory\\_health\\_matters\\_here\\_s\\_why](https://www.ted.com/talks/your_sensory_health_matters_here_s_why)

### **Related organizations**

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