I must admit I take advantage of my senses each and every day. I forget to breath in the fresh air after a nice hard rain. I rarely stop to smell the flowers. I almost never wiggle my toes through the soft spring grass. In designing a Garden for the Blind, I was forced to remember my senses, stop focusing on sight and remember to touch, listen, smell and taste. The design of the garden softens the predominance of sight to let sound, smell, and touch guide the user through the space.

The garden is to be located on the south slopes of Hume Hall at the University of Florida. People with total visual impairment, slight visual impairment and no visual impairment can enjoy the space. According to Lighthouse.org 180 million people worldwide have a visual disability of some kind. Of this, 25% are legally blind and 75% are partially blind.

Therefore, a visually and auditory prominent wayfinding structure will be located within the garden and leading to the garden. Throughout the University of Florida campus, seven-foot cylindrical columns should be placed to help draw pedestrians into the garden. Each column will be brightly colored to allow for persons with sight impairments to easily recognize the form. On top of each cylinder, metal chimes are placed that create a recognizable sound as the wind blows. Within the gardens, the chimes will allow visually impaired persons to wander off the paths and return to the garden by following the sound.

The main entrance of the garden is located at the intersection of the paths from both parking lots. An interactive kiosk uses large font and three-dimensional maps to illustrate the garden layout. The path meanders according to the topography creating a slowly sloping path that is wheelchair accessible. The main path through the site is eight feet wide, accommodating two wheelchairs and accesses the Hume Hall dormitories and adjacent sports field.

The path transforms through three distinct areas: the water garden, woodland garden, and social garden. A wooden boardwalk floats above the small pond south of Hume Hall. A forking path allows pedestrians to walk atop the boardwalk or take a path that slowly slopes to the water level. Along this path, pedestrians can run their hands through the water while listening to the sounds of waterfowl, rustling grasses, and insects.

The path slowly slopes back up to grade and enters the woodland garden. Here, a portion of the path becomes a small rock path with creeping thyme. The contrast of hard and soft surfaces creates interest, while the herb emits a pleasant smell when stepped upon. A handrail, which continues throughout the garden, transforms and allows the users to guide the hands around the tree until the handrail continues on the other side of the tree. Plants within the woodland garden are chosen for their tolerance of shade, as well as their tactile and aromatic qualities. An overhead canopy creates an intimate space, with small, quiet nooks for the users to stop and reflect on the space. Sounds of birds, rustling branches, and scavenging squirrels are just a few of the sounds found within the woodland garden.

The tree canopy fades as the path enters a central social space. The space is large enough for small gatherings and educational activities. At the center of the social space is a rain curtain that
can be accessed easily by persons on foot or in wheelchairs. The tactile experience of running fingers through the tumbling water is compounded by the soothing sounds of water. Water is pumped from the pond, filtered, and circulated through the rain curtain. Along the outskirts of the social space are vertical planters, wooden structures containing sod and hanging plants. The planters contain edible plants that contain antioxidants, a component of some plants that can help strengthen eyesight. Squash, cucumbers, peppers, and tomatoes are a few plants with _healing_ properties. Filtered water from the rain curtain can be used to water the garden, creating an interactive environment. The edible plants evoke the senses of taste, touch, sound, and sight. Many of the fruits are brightly colored in contrast to the green foliage, and the fruit attracts many insects.

Seating areas are incorporated into the vertical planters, so users can enjoy the space for long durations of time. Additionally, an overhead canopy will be created that allows for users to adjust the light levels within the social space. A wooden blind-like structure can be adjusted to accommodate the differing light sensitivities of users with a wide range of vision impairments.

The path circles around to create a closed loop that allows for users to navigate easily throughout the garden without relying upon their sight. Raised garden beds are filled with plants with contrasting colors, textures, and pleasant smells. Catmint, alyssum, iris, lamb's ear, and various grasses are just a few of the plants that can be easily felt along the path. The raised planters slowly shift between 24" and 32" to allow easy access to the tactile qualities of both short and tall plants.

The Garden for the Blind is a place for all users, but focuses on creating an environment that reduces the dependency on sight and heightens the users' awareness of sound, smell, and touch. Plants and physical structures are chosen for their use of contrasting, bright colors, tactile, and aromatic qualities. The garden becomes an extension of the landscape, playing off existing topography and physical site characteristics.

The garden empowers those without sight, by designing with touch, sound, and smell, instead of relying on visual cues. The garden also helps to remind users with full use of their senses to stop and smell the flowers, run the hands through the grass and listen to the sound of falling water.

**Project Description > Garden for the Blind > University of Florida**

*Ian Hampson*

The overall intent was to create a multi-sensory garden that provided a variety of stimuli while operating on a within a simple organizational structure.

One enters the garden from the east adjacent to the parking lot. Located along the path that connects the creek bridge to Hume Hall is a circular gathering space that is 12 feet in diameter. In the center is a tactile map of the garden so that the blind may learn the layout of the paths and location of certain types of plants through grooves and brail. Also, at that location there are four buttons that the user can push to activate a sound that correlates to the zone in which that sound is located (the four zones being: full-sun garden, partial shade perennials and full-sun herbs, the lilac terrace, and the willow-walk. Once pushed the tones will alert the blind to the approximate location and distance from their current position. The tones will also sound intermittently on their own to give the garden a life-force or a "breathing" pattern. (note: the intermittent sounds are overridden when the buttons on the tactile map are depressed)
The path layout is in the shape of two loops that converge in the center to and traversed by an axial path to create a primary gathering space. The axial path is indented to connect the garden to the residence hall. The material for the axial path is wood planks that are tightened differently depending on how close or far someone is to the primary gathering space. This allows those without sight to walk along the path knowing when it will come to an end. This is based upon weather the creaking sound is diminishing or amplifying. (Diminishing sound indicates one is moving closer to the end). The primary paths in the garden are constructed of concrete to provide a smooth surface for safe travel.

In the full sun garden, plants will be mounded in their respective areas while a hand rail etched with brail informs the users what they are smelling and what they are near as they are walking through the garden. The interval at which brail words are placed will be spaced farther apart than in text form to allow the user to walk at a steady pace. These inscriptions in the handrail are general notations that correlate to more detailed description displays located near planting areas of significance. These displays are constructed out of cooper and are 2 foot tall cylinders which sit atop a pole. Etched on each cylinder is a narrative about what the user is near and significant facts about each plant in the immediate area. Next to each plant description will be an impression of if the plant leaf/stalk/bark so that the user can feel that and then find the plant amid the plating beds and swaths and thus draw a correlation. This hand rail method continues through the lilac terrace and to the partial-shade perennial / full-sun herb area.

The willow walk does not utilize the hand rail method, rather it relies on the texture of the path to guide the user. The concrete path will be flanked by soft mushy ground that will indicate to the user when he or she is close to the edge. Also in this area the weeping willow branches are designed to hang directly in the path so that the user must feel his or her way through by parting the tree leaves. Another area where the rail is not used is behind the partial-shade perennial area where a gently sloping hill ascends from the level of the path allowing the user to climb it while being guided by mosses that are growing on the rocks.

The lilac terrace is intended to provide a robust smell for the user. Also the retaining wall that was used for the terrace was required to allow for the regarding of the area south to achieve a shallow slope to facilitate an easy walk for the users. The retaining wall itself is constructed of highly polished steel that will reflect heat off the surface and give a temperature change to the user just before he or she enters the partial-shade area.

Other elements in the garden include a massing of pampas grass flanking the axial path adjacent to the wetland water body. These tall flowing grasses will rustle in the wind and add sound. There is a red wall that terminates the axial path that is covered with brail and a detailed topographic relief that tells a narrative about the garden and the university. Also included in this garden is a pergola attached to the commons building leading up to the red wall. This pergola will be supporting wisteria which has hanging vines and yields a pleasant aroma. Next to the lilic terrace is a vine espalier that delineates the path from the extents of the Hume Hall grounds. The tones of the garden emanate from sound stalks which are copper tubes that raise 12 feet out of the ground. These sound stalks will have smoke billowing out of the tops for the visual interest of those with sight. The copper was chosen to create material uniformity in the garden. Next to each sound stalk is a local-area tactile map that gives a more detailed description of the particular zone one is in, and can activate the sound stalk tone. The path that connects eastern Hume Hall to the creek bridge is replaced with wood planks to further correspond with the axial relationship between the garden and the residence hall.