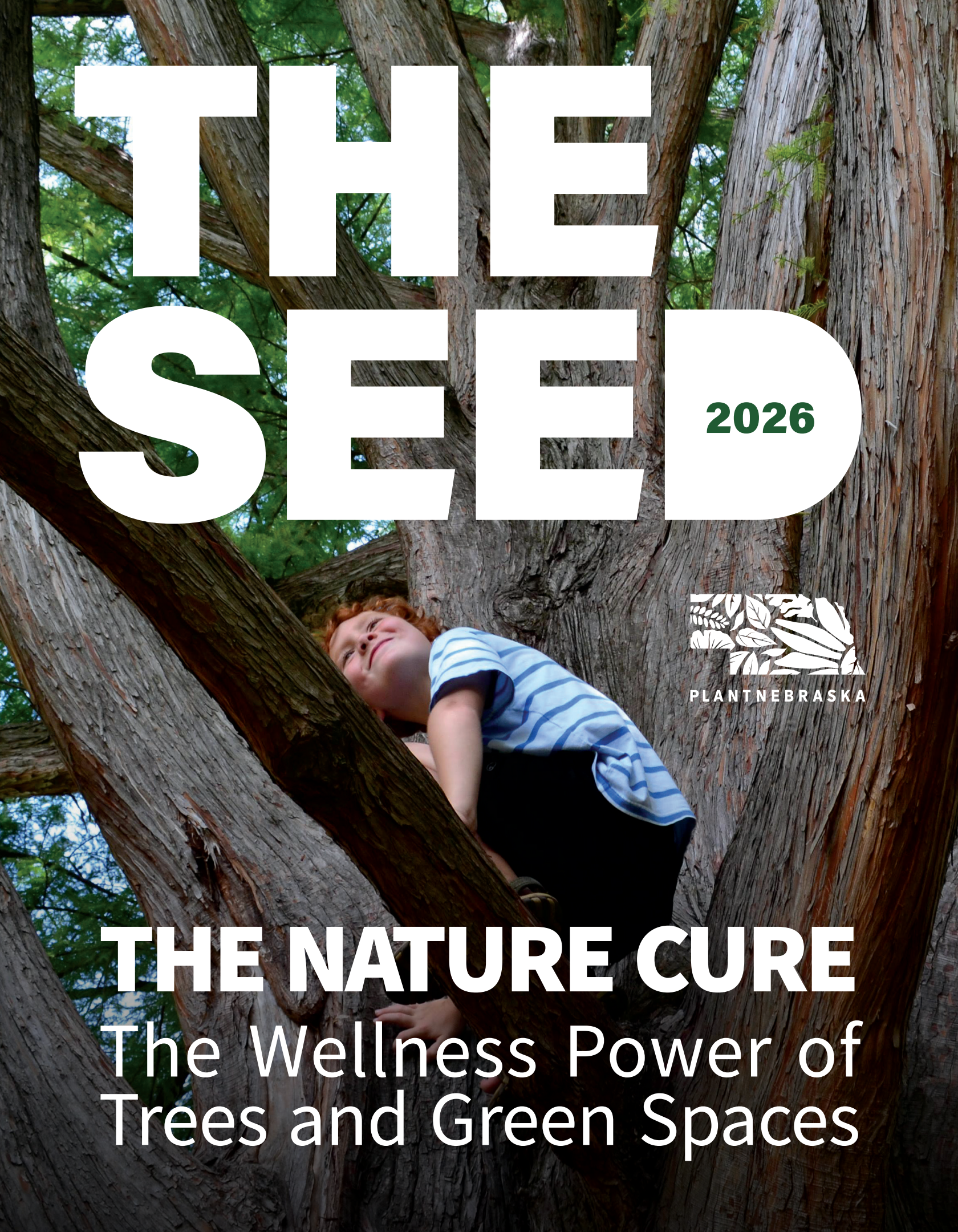

# THE SEED

2026

PLANTNEBRASKA

# THE NATURE CURE

## The Wellness Power of Trees and Green Spaces

# A MESSAGE FROM THE EXECUTIVE DIRECTOR

Hanna with her husband, Matthew, at Smith Falls State Park in Valentine

PlantNebraska staff members Michelle DeRusha (left), Toby Burnham (front center) and Bob Henrickson (back center) with Hanna at Denver Botanic Garden

**If I could ask you to close your eyes and keep reading, I would—but even though that would make this exercise more impactful, it's also impossible. So keep reading and come along on the journey, but imagine your eyes are closed.**

Think about that first scoop of soil in the spring when you're planting—the smell of it, the texture in your hands. How does it make you feel? Now think about a trip to your favorite place to walk in nature. What do you hear? How does it feel when the sun hits your face? What does the air smell like? What does the ground feel like under your feet?

All of these prompts bring me back to some of my favorite places, the places where I feel most whole. A few years ago, after we finished setting up on one of our camping trips, I sat down and stared into the forest. My husband turned to me and said, "You look purely contented, and you only ever look like that in nature."

Nature is a cure—a balm for the sometimes-gritty world in which most of us live. At PlantNebraska, part of our mission is to make that world a little less gritty and nature a lot easier to access, even if it's just by looking out your window. When they created the Nebraska Statewide Arboretum, the original intent of our founders was to bring the trees to the people. Instead of establishing a traditional state arboretum on capitol grounds or at a university, they chose to create sites across the state that would provide access for all Nebraskans to the trees of Nebraska.

We're proud to continue this tradition as PlantNebraska—and to supercharge it as we move toward our next 50 years.

We believe strongly in the healing power of trees and plants. We also know that access to green spaces does more than heal; it serves as a preventative medicine. People who have safe and easy access to green spaces do better in every realm of their lives. We plant Nebraska for healthy people, vibrant communities and a resilient environment.

We're leaning into that first part of our mission with this year's edition of *The Seed*. Throughout this magazine, you'll learn about the many ways nature impacts our health and well-being. And as we all know, human health influences the other two pillars of our mission: vibrant communities and resilient environments.

As you read the stories in this year's *Seed*, I hope you carry those sensory memories with you—the soil in your hands, the sun on your face, the quiet comfort of a familiar trail. These moments remind us why this work matters. They remind us that nature is not a luxury; it is a lifeline. And when we plant wisely, care deeply and advocate boldly, we make that lifeline stronger for everyone.

**Thank you for being part of this movement. Together, we are planting a healthier Nebraska—not just for today, but for every generation still to come.**

**Planting with you,**

**Hanna Pinneo**
Executive Director
PlantNebraska

# BOARD OF DIRECTORS



# OUR MISSION

**WE PLANT NEBRASKA FOR HEALTHY PEOPLE, VIBRANT COMMUNITIES AND A RESILIENT ENVIRONMENT.**

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## BITS OF GARDENING WISDOM

Pressed Flowers

*"THOUSANDS OF TIRED, NERVE-SHAKEN, OVER-CIVILIZED PEOPLE ARE BEGINNING TO FIND OUT THAT WILDNESS IS A NECESSITY."* - **JOHN MUIR**

Nature Journaling

### THE HISTORY, ART AND THERAPEUTIC PRACTICE OF PLANT PRESSING

The practice of pressing flowers and plants dates back to Egyptian, Greek and Roman times. Flower pressing later became a popular pastime for wealthy Europeans during the Renaissance and an important part of botanical preservation and during the Victorian era. The trend spread to America in the 1800s and has continued to this day, with modern flower pressings decorating cards, bookmarks and wall art or as a way to preserve memories of a special event.

Plant pressing is also a form of therapeutic horticulture, which uses plants, flower arranging and gardening to improve mental and physical well-being. The repetitive, focused nature of selecting and arranging the blooms, stems and leaves can be a meditative practice, while paying attention to colors, textures and patterns encourages a state of presence and mindfulness.

#### TIPS FOR FLOWER PRESSING

- Select blooms in various stages (flatter flowers like cosmos work better than those with a bulkier seedhead like coneflower) and lay them flat on a sheet of waxed paper inside the open pages of a heavy book.
- Once you have the flowers arranged on the page, lay another piece of waxed paper over the top, close the book and weigh it down with a stack of heavy books or a heavy object.
- Check every few days to see how the drying is progressing; it can take up to two weeks.
- Once your flowers are dried, carefully remove them from the waxed paper (they might stick a bit; a good pair of sharp tweezers helps) and store them in an airtight container.
- Use clear-drying craft glue to adhere the dried flowers to paper stock or "floating" picture frames to create your artwork.

### SLOW DOWN AND SEE: THE RESTORATIVE POWER OF NATURE JOURNALING

Nature journaling is a centuries-old method that is used to record and explore observations of the natural world through written descriptions and illustrated drawings or photographs. You don't need to be an artist or naturalist to get started; nature journaling simply requires patience, attentiveness and access to outdoor space (even a window through which to observe the outdoors will work!).

Not only is nature journaling relaxing and enjoyable, it also positively impacts the journaler's mental and physical health, too. "Nature journaling can be an avenue for people to relieve stress," said Penn State researcher Lucy McClain. "It can also help people deal with grief or process anxiety or depression. Nature journaling is restorative, giving people a chance to slow down, disconnect from the stressors of daily life, and pay attention to their surroundings and be creative in how they capture that."

Grab a notebook and a pen and head outdoors to try your hand at nature journaling. In the simple act of noticing and recording, you may discover a deeper connection to the natural world—and a renewed sense of balance within yourself.

# TAKE A WALK IN THE WOODS

## THE SCIENCE BEHIND FOREST BATHING & HOW THE PRACTICE CAN IMPROVE YOUR HEALTH

In 1903, F.O. Stanley, a wealthy inventor from Maine who was suffering from tuberculosis, was advised by his physician to travel west to Colorado, where the thin alpine air was believed to improve respiratory health and potentially extend life expectancy. By the end of his first summer in Estes Park, Stanley's health had improved dramatically, a change he attributed to the mountain air, "sweetened by great Ponderosa pine." Inspired by his renewed vitality and the beauty of the Rockies, he opened the Stanley Hotel in 1909 to offer others the same restorative experience. Today, the hotel is recognized as a historic landmark and is also known for its appearance in Stanley Kubrick's film *The Shining*.

### THE SCIENCE BEHIND THE SCENT

The ponderosa pine *(Pinus ponderosa)*, endemic to the American West and native to Nebraska, is a large, long-lived evergreen that can reach heights exceeding 200 feet under favorable conditions. Its gray, plated bark with orange undertones emits a sweet scent reminiscent of vanilla or butterscotch—the scent Stanley associated with his recovery.

The aroma of ponderosa pine originates from naturally occurring chemical compounds known as phytoncides that are released by pine *(Pinus)*, fir *(Abies)* and spruce *(Picea)* as a defense mechanism. Contemporary scientific research demonstrates that phytoncides—including alpha-pinene, beta-pinene, limonene and camphene—not only protect plants but also exert measurable physiological and psychological effects on humans.

### FOREST BATHING HELPS YOUR HEALTH

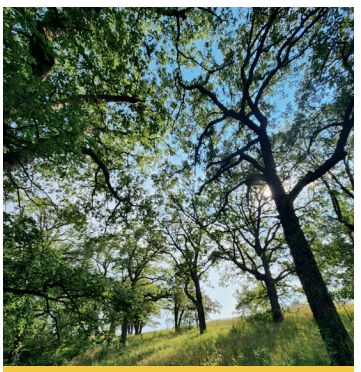
Dr. Qing Li, a leading researcher in environmental medicine, has dedicated his career to investigating the health benefits of forest exposure. Since 2004, he has conducted numerous studies in Japan that link "forest bathing" *(shinrin-yoku)* with enhanced human health. His findings indicate that as little as two hours of forest immersion per week can significantly increase the activity of natural killer (NK) cells, which play a critical role in combating infections and certain cancers. Notably, these immune-enhancing effects can persist for weeks to months following exposure.

Beyond immune function, the practice of forest bathing has also been shown to stabilize mood more effectively than some pharmaceutical antidepressants, as well as reduce cortisol levels, lower heart rate and blood pressure and improve overall well-being. To achieve maximum benefits, Li emphasizes the importance of engaging all five senses, particularly smell, and maintaining mindfulness by disconnecting from digital distractions. While short exposures confer measurable benefits, longer immersions yield greater and more sustained results, including reduced anxiety and depression and improved sleep quality.

F. O. Stanley's recovery was likely influenced by multiple factors; however, his emphasis on the "sweet air" of ponderosa pine is notable. Whether through reduced stress, improved immune function or psychological restoration, his experience aligns with modern evidence supporting the health-promoting effects of forest environments. The same ponderosa pines that once filled Stanley's lungs with their aromatic compounds continue to stand today, offering their quiet therapeutic benefits to all who walk beneath their canopies.

***John Woodworth is an Assistant Conservation Forester for PlantNebraska and the Nebraska Forest Service.***

A row of wintery ponderosa pines in Waverly



A white oak stand in southeast Nebraska

## 5 TIPS FOR PRACTICING FOREST BATHING

### ADAPTED FROM QING LI'S *FOREST BATHING: HOW TREES CAN HELP YOU FIND HEALTH AND HAPPINESS*

**1. CHOOSE A FORESTED SETTING.**
Select a natural area, preferably forested, that feels peaceful and restorative. Leave digital devices behind and allow your senses to guide you into the environment.

**2. ENGAGE THE SENSES.**
Observe the movement of leaves, the dancing shadows and the texture of bark. Breathe deeply and notice the forest's distinctive aromas.

**3. MOVE MINDFULLY.**
Walk slowly or practice gentle stretching, breathing or meditation. The goal is to connect with nature, not to exercise.

**4. BE PRESENT IN ANY SEASON.**
Forest bathing can occur anywhere trees grow. Approach the experience with mindfulness and openness, regardless of the weather or time of year.

**5. TAKE YOUR TIME.**
Spend approximately two hours immersed in the woods, if you can. Research indicates this duration optimizes psychological and immune benefits, though even brief visits improve well-being.

# MEDICINE MEETS NATURE

## HOW GARDENS AND GREEN SPACES SUPPORT HEALING, COMFORT AND CONNECTION IN HEALTHCARE SETTINGS

A seating area and fountain provide places of respite at the April Sampson Cancer Center Sacred Place's garden.

Blooming iris offer a splash of early spring color in the Hemingford Care Center's garden.

False blue indigo *(Baptisia minor)* bloom outside residents' windows at the Hemingford Care Center.

Hospitals, doctor's offices and long-term care facilities are designed to save lives. To do that, they must be clean and efficiently controlled environments—qualities essential for physical recovery and disease management but often at odds with emotional well-being. Chronic conditions (cancer, injury, disability, etc.) have an emotional and physical toll that both hospitals and residential care facilities (rehabilitation, supported living, memory care, etc.) need to address in order to care for all aspects of their residents' well-being.

### HEALING SPACES FOR BOTH PATIENTS AND STAFF

Gardens and natural spaces at medical facilities complement indoor care and create a holistic setting where patients can experience physical and emotional healing. Mental and emotional recovery depends on a sense of security, peace and connection—qualities that nature offers in abundance. Surrounded by trees and plants, people are more open to accepting or understanding challenging news. For loved ones witnessing a difficult recovery or preparing for loss, these spaces offer a safe and grounding escape.

Physical therapy patients benefit from movement outdoors in a safe, yet challenging environment. Walking paths let them balance on uneven surfaces and navigate obstacles, encouraging movement with purpose and transforming routine exercise into meaningful recovery. Fresh air, natural light and the sensory richness of the outdoors can boost mood and motivation. For long-term care residents, outdoor spaces counter isolation and loneliness, support cognitive function and allow exploration and free movement.

Open spaces encourage social activities (throwing or kicking a ball, playing lawn games, or gathering with friends). These areas provide a sense of normalcy for patients who may feel isolated during their recovery and offer a non-clinical environment in which to relax. Planned activities encourage conversation and companionship, while open-air visits offer a safer way for those with compromised immune systems to gather with family and friends.

For nurses, doctors and other staff whose jobs are both physically and emotionally demanding, a break outdoors can be significantly more restorative than a breakroom. Access to rooftop gardens or walking paths improves the quality of those breaks and helps reduce burnout. In the same way their patients and families do, healthcare professionals benefit from a chance to process emotional events surrounded by nature.

Designing gardens and outdoor spaces for medical facilities involves unique challenges. Accessibility, while important everywhere, becomes essential in these environments. Patients using wheelchairs, walkers or working to regain balance should be able to reach individual areas of the garden, not just the main paths. Maintenance is also crucial: walkways must remain clear, plants trimmed and debris removed. Seating, shade and shelter from rain or wind should be easy to reach and comfortable for everyone.

The gazebo at Hemingford Care Center is surrounded by a lush perennial garden.

Walkways around the April Sampson Cancer Center campus in Lincoln offer both staff and visitors a place to enjoy nature.

Residents at the Hemingford Care Center enjoy connection and conversation in the garden gazebo.

## A SACRED PLACE

The April Sampson Cancer Center in Lincoln is a beautiful example of many of these features. The property includes a Sacred Space, a series of gardens and outdoor spaces designed in partnership with the non-profit organization Nature Sacred and the engineering firm Olsson. The center honors April Sampson, who processed her own cancer journey on the banks of the pond the property was designed around. Designers built upon that landscape to create a space where patients, families and staff can rest and reflect. A local building and grounds contractor tends both interior and exterior spaces, checking on the gardens almost daily to ensure accessibility and comfort.

Within the Sacred Place, labyrinths and quiet corners invite reflection, grief work and therapy sessions. Clinicians may not always know how to address the emotional aspect of major health events, but the garden helps open those conversations. Hospice workers, chaplains and counselors use the space to guide emotional healing. Physical therapists use the outdoor paths, uneven terrain and garden activities to engage the senses and muscles in ways hallways cannot. The gardens host yoga and fly-fishing classes (in partnership with Cornhusker Fly Fishers), as well as hope and healing events. Danielle Henrickson, the center's director, plans to continue developing gathering areas, including an amphitheater for outdoor programs and conferences.

## SMALL, SIMPLE GARDENS CREATE DEEP CONNECTIONS

Outdoor spaces don't have to be large or elaborate to make a meaningful difference. The Saunders Medical Center in Wahoo completed a Trees for Nebraska Towns project along a walking path that circles its campus. The path that serves residents of the facility's long-term care home will eventually be shaded and sheltered as the trees mature, making it safer and more enjoyable for both residents and staff. The project included a watering contract with Great Plains Nursery to keep maintenance simple and sustainable.

The Hemingford Care Center took part in a Greener Towns project to plant native species outside residents' windows. Selected to attract pollinators and birds, the plants bring beauty up close where it can be enjoyed by all, even when mobility is limited. The new garden complements existing trees and landscaping, including a gazebo that became a vital space for family visits during Covid. Managed by local volunteers and planted with help from PlantNebraska staff during Wildflower Week, the project shows how simple gardens can create deep connections to nature and community.

Medical facilities provide necessary (and often lifesaving) care for the body. By including trees, gardens and green spaces on their campuses, they extend that care to the whole person and provide for emotional needs of their patients, families and staff.

***Sarah Buckley is a Landscape Specialist for PlantNebraska.***

# LEARNING UNDER THE LEAVES

## THE BENEFITS OF GREEN SPACES IN EDUCATIONAL SETTINGS

Step outside a classroom, and something shifts. The buzz of fluorescent lights gives way to the sounds of rustling leaves, chattering birds and humming bees. The sterile indoor air is replaced with the sharp scent of tomatoes ripening in the hot sun, the minty freshness of blooming hyssop, the earthiness of moist soil.

From a preschooler planting seeds in a garden bed to a college student learning to identify trees in a dendrology class, outdoor learning offers lessons that reach far beyond textbooks—rooting knowledge in experience, curiosity and wonder and helping students focus better and think more creatively.

### THE SCIENCE OF ATTENTION RESTORATION

The fact that nature can enhance attention and focus is not a new theory. In the late 1980s, psychologists Rachel and Stephen Kaplan developed what's known as "Attention Restoration Theory" (ART), which posits that exposure to natural environments is not only enjoyable, it also improves our focus and ability to concentrate through "soft fascination," which means our attention is held without expending much effort. So, for example, gazing at trees or plants or listening to the sound of rushing water engages our brains without taxing them, unlike highly stimulating activities like work tasks, which typically don't allow for much opportunity to reflect.

Studies show that ART can help those who struggle with Attention Deficit Hyperactivity Disorder (ADHD). One study concluded that children with ADHD performed better on a concentration task when visiting a wooded area than when visiting a town. Another study showed that a 20-minute walk in a natural area improved cognitive performance and reduced symptoms of ADHD.

Dr. Anne Schutte, associate professor in psychology at the UNL Center for Brain, Biology and Behavior, has found that spatial working memory—the ability to remember locations—and attention improve in young children after they have spent time in nature. She and her colleagues looked at the differences in memory and attention between schoolchildren who went for a walk in a natural area versus those who walked through an urban area. When they were tested in a laboratory following their excursions, the kids who had walked in the natural setting showed measurable improvement in both attention and in their ability to recall specific details about where they had been.

### NATURE BOOSTS WELL-BEING

There's plenty of evidence backing the mental and physical health benefits of spending time in nature as well. Access to green spaces helps us manage stress by regulating our sympathetic nervous system. Research indicates that exposure to nature also reduces the risk of psychiatric disorders, lowers cortisol levels and blood pressure and even corresponds to increases in empathy and cooperation.

"Access to greener playgrounds in elementary schools and early childhood centers has been shown to have all sorts of positive effects on socio-emotional development," said Dr. Schutte. "Kids who play in green spaces have decreased internalizing and externalizing behaviors—meaning less depression and fewer incidences of acting out—and better social skills. They also engage in more creative, imaginary play."

The Westview High School Arboretum offers space for experiential learning and a place to decompress.


Students at a local childcare facility enjoy a field trip to Prairie Pines Nature Center in Lincoln.

University of Nebraska-Lincoln students pot up houseplants at PlantNebraska's booth on City Campus.

Time outdoors has been shown to positively impact attention, focus, and the physical and mental health of students of all ages.

## DESIGNING LANDSCAPES THAT SUPPORT STUDENT LEARNING

Westview High School in Bennington celebrated the opening of their brand-new arboretum (a PlantNebraska affiliate site) last May. The space is used by science classes, but a secondary, unexpected benefit has been the students, staff and community members who enjoy the arboretum on their own time.

"It doesn't matter what time I go out there, I always see someone sitting on a bench, reading a book from the Little Library that's in the arboretum or just resting," said Dr. Rachael Arens, Westview curriculum specialist and director of College and Career Academies and Pathways. "This is more of an intrinsic benefit—that there's a space here where students can feel a bit calmer, quieted and connected to nature."

Teachers also bring their classes to the arboretum after a test for a quick mental health break or to help their students reset their brains. "Teachers are recognizing where their students are in terms of their mental health," said Dr. Arens. "They understand that being in nature is beneficial for their students."

As more schools rethink how and where learning happens, the research findings of experts like Dr. Schutte and the evidence that's quickly accruing about the benefits of spaces like the Westview Arboretum remind us that education thrives when rooted in the natural world. By intentionally weaving nature into educational environments, we're not only supporting healthier, more engaged learners, we're cultivating future stewards who understand, firsthand, the value of learning under the leaves.

## A LITTLE LEAF GOES A LONG WAY

When it comes to improving your health, even a single potted houseplant can make a difference.

Research shows that indoor plants can reduce physiological and psychological stress, lowering the blood pressure and heart rate of those who tend them. Studies have also shown that when elementary students were assigned to a classroom with either a fake plant, a real plant, a photo of a plant or no plant, only those who spent time in the company of the real plant experienced improvements in focus and attention.

Each August, PlantNebraska sets up a booth at the annual Student Wellbeing Fest on UNL's City Campus, where hundreds of students line up to pot their very own houseplant of choice, all of which are donated by PlantNebraska members. Last summer, more than 350 students took a spider plant, philodendron, succulent or one of the many other varieties available back to their dorm or apartment.

"For some students, this is the first plant they have ever owned and cared for," said Toby Burnham, member and affiliate coordinator for PlantNebraska. "They are so happy to walk away with their very own plant. We've had many students come back the following year to get a second houseplant, and they are always so excited to report that their first plant is still alive and thriving."

***Michelle DeRusha is the Communications and Events Coordinator for PlantNebraska.***

Tactile and other sensory experiences can be an important component of learning in nature.

Students at Calvert Elementary School in Lincoln plant a pollinator garden.

PlantNebraska Executive Director Hanna Pinneo plants a pollinator garden with preschoolers at Underwood Learning Center in Omaha.

Visitors tour the newly opened Westview High School Arboretum in Bennington in May.

# FROM SIDEWALK TO SANCTUARY

## TREES AND GREEN SPACES BENEFIT COMMUNITIES LARGE AND SMALL

PlantNebraska members Peter Smith and Annette Clark Thompson plant a sycamore tree in their Lincoln neighborhood.

Western Nebraska Community Forester Chrissy Land and volunteers plant perennials in a streetside bed in Arapahoe.

Chrissy Land and volunteers plant a tree in Valentine.

Whether large or small, urban areas all share similar characteristics such as paved roads and parking lots, vehicles, large brick and stone buildings, black rooftops and heat-producing energy infrastructure and AC equipment. As a result of our built environment and its heat-absorbing surfaces, cities experience temperatures as much as eight degrees Fahrenheit warmer, compared to the natural landscapes that surround them. This temperature difference has been termed the "Urban Heat Island Effect," and it can have profound impacts on our human health.

### THE IMPACT OF URBAN HEAT ISLAND EFFECT

Increased urban temperatures expose us to a higher risk of heat-related illness including heat exhaustion, dehydration and heat stroke. In the United States, heat-related deaths saw their largest increase in 2023, with a staggering 2,325 deaths with heat recorded as the underlying or contributing cause.

In addition to heat-trapping surfaces warming our cities, rising temperatures also interact with air pollution from vehicles and industry, leading to increased ground-level ozone. This occurs when higher temperatures and the presence of sunlight accelerate reaction rates of ozone precursors like nitrogen oxides and volatile organic compounds. In the upper atmosphere, ozone is beneficial in shielding the Earth from damaging UV light. However, breathing in ground-level ozone has been linked to coughing and sore throats, as well as the aggravation of asthma, emphysema and bronchitis. Higher ozone concentrations can be detectably different throughout the city, affecting pedestrians and neighborhoods differently depending on wind direction and proximity to traffic and shade.

### HOW COMMUNITIES BEAT THE HEAT

Hot cities can implement changes to help mitigate some of the worst outcomes of the Urban Heat Island Effect. For example, in western states it's common to see roofs painted white, which reflects the sun away from heat-absorbing surfaces. Electricity generating solar panels also serve as shade structures when elevated over parking lots and bus stops.

These strategies are also available to us here in Nebraska. However, street trees and community forestry have been our inheritance, and the benefits provided by their shade cannot be overstated. Research reports that shade from a healthy urban tree canopy has been shown to cool surrounding temperatures between 11 and 25 degrees Fahrenheit. When planted strategically on the west side of a building, trees can also cool interior spaces and improve a building's energy efficiency, reducing its cooling costs. It's safe to say that of all the strategies for mitigating the worst effects of the Urban Heat Island Effect, planting trees is our favorite option and something we will continue to advocate for as we lose ash and older mature trees around the state.

By actively implementing these proven strategies in towns and cities, our environments can become cooler and healthier places in our increasingly hotter world. Read on the next page about how PlantNebraska is partnering with communities to help them mitigate Urban Heat Island Effect and create healthier, more welcoming spaces.

***Brad Kindler is a Sustainable Landscape Specialist for PlantNebraska and the Nebraska Forest Service.***


Student volunteers plant perennials in a streetside bed in Arapahoe.

# GREEN INFRASTRUCTURE KEEPS NEBRASKA COMMUNITIES COOL AND CONNECTED

When you hear the phrase “Urban Heat Island Effect,” you might think of large metropolises like New York or Chicago, where there are hundreds of skyscrapers, millions of residents and a lot of concrete. But even smaller communities in more rural parts of the country like Nebraska can suffer from the effects of a warming climate.

No matter the size of a community, there is an ongoing interaction between the trees, the built infrastructure and people. The amount of shade and natural foliage can often indicate the health of a community. A town with few trees or a lot of diseased and damaged trees looks like it is struggling and appears less inviting. On the other hand, a community that is lush and green with large, mature, healthy trees looks vibrant, inviting and flourishing.

Imagine your own hometown celebrations—the car show, the parade, the farmers market. Most of these events take place in the downtown area, during the hot, sunny, summer months. People show up hours early to get a spot in the shade because they know they’ll be more comfortable and able to stay longer. In fact, research even shows that shoppers spend more time and money when they shop in districts with trees, shade and green spaces.

As our climate continues to change, more communities are considering green infrastructure in their planning and development. For example, when Valentine and Arapahoe revitalized their downtown business districts, Greener Towns and Waterwise grants from PlantNebraska enabled them to incorporate green infrastructure into their development plans, including tree canopy, perennial shrubs, grasses and plants—all of which benefit the ecosystem and extend the life of gray infrastructure by intercepting and utilizing storm water runoff and shielding pavement, buildings and metal fixtures from the sun.

Green infrastructure also makes a community more inviting to residents and visitors alike and encourages community connection. “We get a lot of traffic through the business district, so we wanted to encourage people to slow down and take a look around as they are coming through our community,” said Economic Development Consultant Bobbi Petit, who worked with Arapahoe community leaders on the downtown revitalization project.

Scottsbluff also used PlantNebraska grant funding to integrate trees into their downtown. The town’s diverse tree canopy provides refreshing shade, which makes for a pleasant shopping experience and creates an inviting space for popular events such Bands on Broadway during the summer.

The bottom line: trees are an integral part of sustainable development, no matter the size of a community. Perhaps even more important, though, is the fact that trees and green spaces also invite people to linger, to connect with one another and to enjoy life a little bit more.

***Chrissy Land is the Western Community Forester for PlantNebraska and the Nebraska Forest Service.***

Flowering thyme
*(Thymus vulgaris)*

Blue giant hyssop
*(Agastache foeniculum)*

Beebalm *(Monarda fistulosa)*

Garden sage *(Salvia officinalis)*

# BACKYARD BOTANICALS

## DISCOVER THE HEALING AND CULINARY POWER OF HERBS

For centuries, people around the world have turned to herbs, native plants and even common weeds for healing. Many of these same plants are also beautiful in the garden, flavorful in the kitchen and beneficial to pollinators.

If you know me, you know I'm a big believer in natural herbal remedies that strengthen the immune system. I'm always studying and discovering—there's so much to learn! The following herbs are safe, easy to grow and wonderful to cook with. Think of them as tonics—gentle, nourishing plants that help restore and support the body over time.

### BEEBALM *(MONARDA FISTULOSA VAR. MENTHAFOLIA)*

Our native beebalm is a powerhouse for health and flavor. Plains tribes used the flower buds and tops as tea for fevers, colds, mouth sores, headaches and respiratory problems. Herbalists today rely on it for natural disinfectants, homemade mouthwash and poultices for minor burns and irritations. Rich in thymol—the same antiseptic compound in thyme and oregano, only stronger—beebalm makes a fragrant tea or a flavorful substitute for oregano or thyme in recipes.

### BONESET *(EUPATORIUM PERFOLIATUM)*

A close relative of Joe-Pye weed, boneset is an attractive native with long, lance-shaped leaves and clusters of white flowers that bloom in late summer. It's a magnet for small native bees, flies, wasps and beetles. Native Americans and early colonists brewed boneset tea for fevers and colds. Its name comes from "breakbone fever" (dengue), so painful it felt as if bones were breaking. Even today, boneset remains one of the best herbal allies for flu and fever. The tea is bitter, so sweeten it or turn it into syrup.

### BLUE GIANT HYSSOP *(AGASTACHE FOENICULUM)*

A pollinator favorite, hyssop is equally at home in the kitchen. Its leaves and flowers add a gentle anise flavor to teas, lemonades, desserts and dressings. The plant naturally produces antibacterial and antifungal compounds—its own defense system and ours, too. Traditionally used to ease coughs and congestion, hyssop also makes an excellent poultice, massage oil or cooling tea for sore muscles and sunburn relief.

### OREGANO *(ORIGANUM VULGARE)*

Used in ancient Greece for both food and medicine, oregano delivers potent antioxidants like thymol and carvacrol—the same compounds that give it its unmistakable flavor. Modern research backs its traditional uses for colds, digestive troubles and skin infections. Cooking with fresh oregano not only boosts flavor but also supports the immune system and fights bacteria and viruses.

### GARDEN SAGE *(SALVIA OFFICINALIS)*

Sage is a true herbal powerhouse, containing more than 160 types of polyphenols—plant compounds with antioxidant and anti-inflammatory benefits. It's incredibly versatile: use it in bath salts, creams, salves, tinctures or mouthwash. Frying sage leaves in olive oil mellows their flavor—crumble them over dishes for a delicious finish (sage popcorn with nutritional yeast is a personal favorite). Sage shines in sauces, butters, marinades, breads and teas. A simple sage tea soothes cold symptoms and indigestion.

### THYME *(THYMUS VULGARIS)*

Native to the Mediterranean, thyme is essential in countless dishes—from marinara and roasted meats to herbal teas. Its essential oils, rich in thymol and carvacrol, provide strong antioxidant and antimicrobial effects—among the highest of any herb. Traditional thyme syrup with honey and lemon soothes coughs and sore throats, while a thyme oxymel (made with honey and vinegar) supports immune health.

Somewhere along the way, we stopped using fresh herbs—it's time to bring them back to the table. Herbs have flavored, healed and beautified our lives for centuries. They're practical, powerful and right at home in our gardens and kitchens. The more we grow and use them, the stronger and healthier we become.

***Bob Henrickson is the Horticulture Program Coordinator for PlantNebraska.***

# CREATE YOUR OWN HEALING LANDSCAPE

With all the benefits green spaces provide, why not create your own healing landscape at home? Attractive home landscapes—especially with healthy plants, flowers and the sound of water—are linked to lower stress, reduced anxiety, improved mood and a better overall sense of well-being. Plus, you get all the health benefits of physical exercise in the garden!

However, lawn and landscape management can easily become an overwhelming chore and a maintenance nightmare, defeating the goal of reducing anxiety and creating a calm healing space. Here are a few tips to keep your healing garden manageable, enabling you to reap the greatest benefits while minimizing the work.

## PRIORITIZE

Determine which landscape areas are most important for your mental health, such as the areas around a deck or patio where you relax. These areas should receive most of your design efforts, and eventually your maintenance energy, allowing other areas to have lower maintenance.

## KEEP MAINTENANCE LOW

Your garden's eventual maintenance needs are determined during the design phase, making plant selection and placement key to creating a beautiful, yet low-maintenance, garden.

To begin designing your healing landscape, start by removing plants with a history of disease, insect or environmental problems such a powdery mildew, leaf scorch or Japanese beetle damage. Replace them with plants that have greater disease resistance or better adaptation to the site, keeping opportunistic problems at bay. Also remove plants currently giving you maintenance headaches, such as a shrub that requires frequent pruning or an annual flower that frequently seeds itself everywhere.

Next, consider the types of plants in your healing garden. On a scale from highest to lowest maintenance needs, annuals are highest, perennials mid-range, trees and shrubs lowest. Take an inventory of your current landscape, then gradually transition to attractive lower-maintenance plants where possible. Masses of annual flowers are beautiful but expensive to purchase each year and time-consuming to plant and maintain. Consider reducing the number of annuals in your landscape, using them sparingly in high-visibility locations for pops of color.

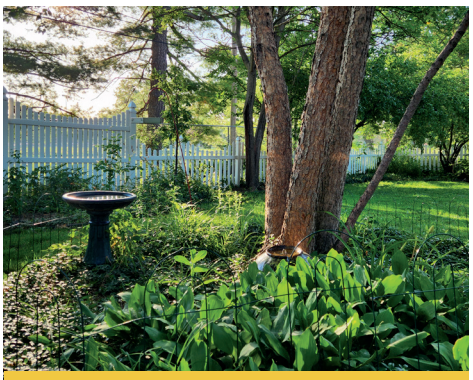
Once your garden is complete, visit regularly and often to complete a few minutes of maintenance. Light work in the garden can be a great stress reliever, and regular short work sessions will often prevent large and more difficult maintenance problems from developing.

## ELEMENTS OF HEALING GARDEN DESIGN

Visit local public gardens or arboreta to view their gardens and determine which features, or plants, you want to add to personalize your healing garden.

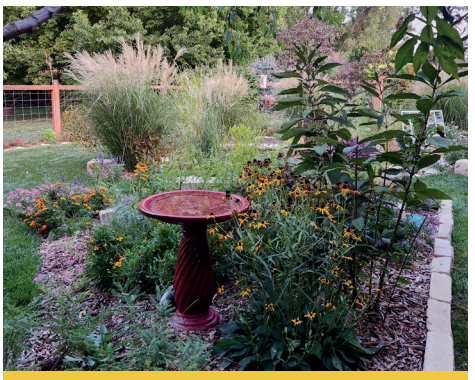
- Soothing colors, such as white or pastel flowers, are less energizing to the senses and create a more peaceful setting. Bright saturated colors can be jarring to the senses when a person is stressed.
- Add plants to attract butterflies and other pollinators.
- Ornamental grasses sway in the wind, adding a soothing movement to the garden.
- If they evoke happy memories, add plants with a pleasant fragrance.
- Use hardscape materials (pavers, concrete) that don't produce a glare.
- Add focal points, such as water, wind chimes, lights or a firepit. Moving water creates a soothing level of white noise that can help mask sounds of traffic, construction and other stressful noise.
- Finally, add some comfortable seating and enjoy.

***Sarah Browning is the District Forester for PlantNebraska and the Nebraska Forest Service.***



A shade garden in Lincoln offers a small fountain set amid a cluster of lily of the valley leaves.

A water feature like this pond in an Omaha garden can offer a soothing element to a landscape.



Native plants like black-eyed Susan *(Rudbeckia)* and Joe-Pye plant *(Eutrochium)* attract butterflies and other pollinators.

# DESIGNING WITH NATURE IN MIND

## THE POWER OF BIOPHILIC DESIGN

When we step into a garden, walk a wooded trail or sit under a tree, something in us relaxes. We breathe deeper. Our minds clear. The connection between people and the natural world isn't just sentimental; it's biological. That idea lies at the heart of biophilic design, a growing movement that reimagines how our homes, workplaces and communities can support well-being by weaving nature into the built environment.

### BRINGING NATURE BACK INDOORS

The word biophilia means "love of life." It was popularized by biologist E.O. Wilson, who proposed that humans have an innate connection to living systems. For most of human history, we evolved alongside nature, shaped by its rhythms and reliant on it for food, shelter and survival. But as modern life has moved indoors, we've built environments that often separate us from natural rhythms: filtered light instead of sunshine, climate-controlled air instead of breezes and hard, synthetic surfaces instead of wood, stone or plants. Biophilic design recognizes the cost of that disconnection and offers a way to bring the restorative qualities of nature back into our daily lives.

At its core, biophilic design depends on three main principles. The first is direct experience of nature, which includes the real presence of natural elements like plants, water, sunlight and fresh air. Think of an office with large windows overlooking trees or a classroom that opens onto a courtyard garden. The second is indirect experience of nature, such as using colors, textures and patterns that echo the natural world. Curving forms, natural materials and subtle reminders of organic shapes all help us feel connected to something larger than ourselves. The third principle is the experience of space and place by designing with the same sense of complexity, refuge and openness we find in nature. This might mean cozy corners that offer shelter, open views that invite exploration or pathways that spark curiosity and movement.

### THE PHYSICAL AND COMMUNAL BENEFITS OF BIOPHILIC DESIGN

These aren't just aesthetic choices. A growing body of research shows that biophilic design measurably improves both physical and mental health. Exposure to natural light helps regulate our circadian rhythms and boosts mood. Views of trees and plants can lower stress, blood pressure and heart rate. In hospitals, patients with natural views recover faster and require less pain medication. In schools, students perform better and show greater concentration. In workplaces, employees report higher satisfaction and creativity. Simply put, when our environments reconnect us with nature, we function and feel better.

Beyond individual health, biophilic design also strengthens communities. Green spaces foster social interaction, reduce urban heat and improve air quality. Buildings that incorporate vegetation and natural materials use less energy and blend more gracefully with their surroundings. When neighborhoods and public spaces reflect the patterns and diversity of nature, they become places that are vibrant, welcoming and restorative—places people want to spend time.

In Nebraska, we're fortunate to have access to wide skies, native prairies and the changing beauty of four seasons. Biophilic design invites us to take inspiration from those landscapes and bring them into our everyday environments. That might mean planting native species in front of an office building, designing shade structures that mimic tree canopies or simply choosing materials that reflect our region's natural character. Even small gestures such as a window view of a garden, a patch of prairie grass or a splash of natural light can make a difference.

As we continue our mission to plant Nebraska for healthy people, vibrant communities and a resilient environment, biophilic design reminds us that nature doesn't end at the edge of a trail or garden. It can be part of our classrooms, offices, hospitals and homes. When we design with nature in mind, we're not just creating beautiful spaces, we're creating places that help us thrive.

***Toby Burnham is the Member & Affiliate Coordinator for PlantNebraska.***

A plant wall at the University of Nebraska's College of Law

A natural branch wall at the Education Center at Schramm State Park Recreation Area in Gretna

Houseplants are a simple way to bring elements of biophilic design into the home setting.

# NATURE'S TOUCH
## HOW GREEN SPACES CAN ENHANCE ELDERCARE

Increasing evidence shows that access to nature is a critical component of wellbeing for older adults. Research consistently supports that exposure to plants and greenspaces enhances physical health, reduces stress and strengthens social connection in eldercare settings. These benefits are most effective when outdoor environments are accessible, thoughtfully designed and able to support both active participation and quiet engagement.

As part of our work at PlantNebraska, we have partnered with a variety of healthcare and residential facilities across the state, and we have seen firsthand how intentional greenspace design can significantly improve the quality of life for older adults. Whether in long-term care, assisted living or day service programs, nature plays a meaningful role in supporting the mental and physical wellbeing of the people these facilities serve.

### A ROOM WITH A VIEW

In the Omaha area, landscape designer Jane English has collaborated with several eldercare communities to create outdoor environments tailored to the abilities and needs of their residents. Her approach centers on understanding what residents can see and experience at different distances—what she calls designing in "zones." She encourages facilities to consider what is visible from residents' windows, what they encounter immediately outside, what appears along accessible walking routes and what surrounds gathering spaces like gazebos and patios. This method ensures that nature is visually and physically present in ways that are safe, usable and engaging.

English also emphasizes seamless connections between indoor and outdoor spaces. In memory care settings, she is attentive to selecting plants and trees that are non-toxic and non-irritating, reducing risks while increasing opportunities for sensory engagement. Facilities she has worked with report that residents become active participants in the life of the landscape—asking questions, monitoring the health of plants and taking pride in seasonal changes. These daily interactions help residents build a sense of place and community within their care environment.

### STAYING CONNECTED & CURIOUS

In Lincoln, Liz Tylander brings a complementary perspective through her work as a registered nurse and horticultural therapy practitioner. As a co-founder of Grateful Growers, she helps lead plant-based programs that support physical, emotional and cognitive wellbeing. Partnering with Aging Partners, Tylander and her team guide older adults through activities such as planting, potting and bouquet arranging. These programs promote fine motor skills, stimulate memory and create opportunities for meaningful social interaction. Volunteers work alongside participants, providing support as needed and helping ensure that each activity is accessible and enjoyable.

The bouquets created during these sessions are then delivered to care facilities throughout Lincoln, extending the impact of the program beyond the workshop itself. Tylander shared one memorable moment from a recent session: an older gentleman began reminiscing about the greenhouses he once delivered to in his youth—stories he had not shared since joining the group. His spouse later explained that he was living with dementia and had rarely spoken in group settings. The sensory experience of working with plants helped unlock memories and spark meaningful conversation.

The work of Jane English and Liz Tylander illustrates the profound influence plants and green spaces can have in eldercare. Their experiences demonstrate that when outdoor environments and plant-based programs are adapted to residents' abilities, they support dignity, curiosity and connection. As Liz reminds us, "Making space to stay curious and connected to all living beings makes us feel whole."

***Hanna Pinneo is the Executive Director of PlantNebraska.***

A bouquet created by Grateful Growers

Gardens at Royale Oaks Assisted Living in Omaha offer a place of respite and beauty for residents.

Erin Schoenberg, Emilie O'Toole, Martha Hakenkamp and Liz Tylander hold bouquets created by Grateful Growers.

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**SANDHILLS GLOBAL EVENT CENTER**

The Spring Affair plant sale offers the largest selection of native and regionally adapted plants in the state—all in one convenient location!

**Want to shop the best selection of plants?** Plan to attend the Preview Party & Sale (or just the Preview Sale) on Thursday, April 23. Enjoy dinner and drinks with friends and then get shopping!

**PREVIEW PARTY & SALE** | THU, APRIL 23

**TICKETS FOR THE PREVIEW PARTY & SALE WILL BE AVAILABLE IN** FEBRUARY.

Spring Affair is PlantNebraska's biggest fundraising event of the year, with proceeds benefiting our tree planting, gardening making and educational outreach programs all year long. Thank you for the support!

MORE INFORMATION AT **PLANTNEBRASKA.ORG/SPRING-AFFAIR**

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