

The Glass Garden News

November 2007

ENID A. HAUPT GLASS GARDEN



NYU
Medical
Center

Glass Garden Hours

Monday – Friday: 8:00 am – 5:30 pm

Saturday and Sunday: 1:00 pm – 5:30 pm

Calendar 2007-2008

November 29, Thursday: *Holiday Plant Sale*, Tisch and Skirball Lobbies, 10:00 am – 4:00 pm

March 13, 2008, Thursday: *Spring Plant Sale*, Tisch and Skirball Lobbies, 10:00 am – 4:00 pm

April, 2008: Sign up for *Spring Budding and Growing Gardener Classes* for young children.

May 8, 2008, Thursday: *Mother's Day Plant Sale*, Tisch and Skirball Lobbies, 10:00 am – 4:00 pm

June 8, 2008, Sunday: *Annual Community Festival*, featuring baby farm animals, 11:00 am – 3:00 pm

June, 2008: Sign up for *Summer Budding Gardener Classes*

September 25, 2008, Thursday: *Fall Plant Sale*, Tisch and Skirball Lobbies, 10:00 am – 4:00 pm

August, 2008: Sign up for *Fall Budding and Growing Gardener Classes*

November 20, 2008, Thursday: *Holiday Plant Sale*, Tisch and Skirball Lobbies, 10:00am – 4:00 pm

We have a choice selection of plants for sale in the Glass Garden every day.

Location

The Glass Garden is located off the Rusk Institute lobby at 400 East 34th Street, between 1st Avenue and the East River, in New York City. It is convenient to the Lexington IRT local subway stop at 33rd Street and Park Avenue, or to stops on the M34, M15, or M16 city buses.

For More Information

Tel: 212/263-6058 • Fax: 212/263-2091

E-mail: glassgardenrusk@nyumc.org

Web: www.med.nyu.edu/rusk/glassgardens

LETTER FROM THE DIRECTOR

Dear Friends,

A few weeks ago on a Saturday, a staff member noticed that one of our parrots seemed unwell. She called one of our volunteers who takes care of our birds. He came in, took the bird to a vet, and, when told the bird needed home care and on-going medication, called another volunteer. She took the parrot to her home to keep it isolated and quiet, and the first volunteer continues to check on the bird and bring its medication.

This kind of involvement and dedication started me thinking about community, a word my daughter often uses. It's from the Latin "communis," and means a common, public, or shared place. Some experts feel that individuals and families in our mobile and long-distance-commuting culture are losing the spirit of community that was once found in places like family, work, churches, or community centers.

Institutions and companies often spend a lot of money hiring organizational consultants to try to develop a sense of community. They want to build a cohesive identity shared by the participants so that they will support the organization and lessen staff turnover.

From my viewpoint, the answer seems to be a rather simple exercise... build a garden. I am truly amazed at the feeling of community that has grown up around our garden—the shared sense of connection and belonging, identification with and spirit of community that people feel for it.

This "community of people" that has grown around our garden includes staff at NYU Medical Center, patients in our horticultural therapy programs, families and friends of patients seeking respite in the garden, young children and parents from the neighborhood, and our garden staff and volunteers.

In this issue, you will read about some of the Garden volunteers who made a personal investment to share in our community for several hours each week. As director of the Glass Garden, I have the good fortune to share the space with an incredible and diverse group of people, who, while not relatives, are part of my community.



Nancy Chambers

Chicago Botanic Garden Classes

Each October since 2003, Nancy Chambers has been traveling to the School of the Chicago Botanic Garden to teach in their Healthcare Garden Design Certificate of Merit Program. This program is designed for landscape architects and designers, and gives them the skills, knowledge and experience they need to design and build therapeutic garden environments for healthcare facilities.

The classes include lectures, group projects, tours and an independent project, mentored by one of the expert faculty members. The content of the training focuses on research-based design, passive and active garden experiences for positive health outcomes, ADA regulations, connection to outdoor and indoor therapeutic spaces, plant selection, safety, characteristics of user groups, privacy, management, marketing and so forth.

Along with Gwenn Fried from the Glass Garden, Nancy teaches garden design for children at healthcare environments and design details for therapeutic gardens and greenhouse facilities. Also, Gwenn lectures about plant material. The classes are stimulating because the landscape architects participating in the program are eager to gain as much knowledge and insight as possible in the short amount of time allocated.

A very interesting component of the class is our long-distance mentoring of two students in their independent projects, which are usually actual projects their firms will be building at a healthcare facility. This year we have two well established professionals whose projects we are overseeing through e-mails.

One is working on a healing garden at a women's cancer center in the Northeast. She is a professional *feng shui* practitioner and is integrating feng shui elements and principals into her garden design to "nurture the spirit, soothe the mind and care for the soul" of the women from the center

coping with the challenges of breast cancer. Our advice to her, thus far, has been based on practical details when considering a water feature and obtaining in-house maintenance support for the project.

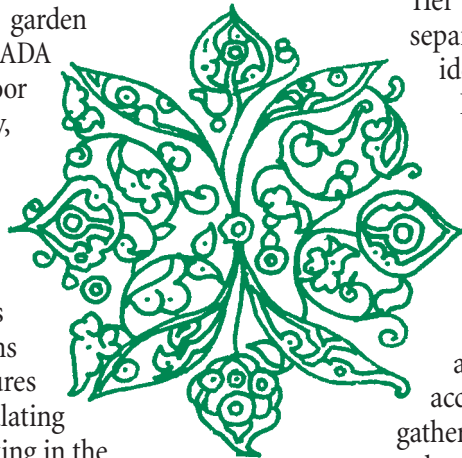
Our other student this year is a landscape architect from a well-known firm that works on large-scale projects for international clients. Her project is for multiple healing and therapeutic gardens at a women's and children's specialty teaching hospital in a small oil-rich country of the Middle East.

Her project includes four large atrium gardens separating different wings of the hospital. Her ideas and inspiration are based on traditional Islamic garden concepts that emphasize enclosing walls for privacy and security, water, shade from trees, colorful flowering accents, fruit trees, nature's music, and geometric shapes and decoration.

She has proposed a *Social Garden*, a *Contemplative Garden*, a *Mosque Garden* and a *Children's Garden*. Her gardens must accommodate movement, formal and informal gatherings, prayer and meditation, individual and group learning, orientation and identification, and active and passive recreation. From the onset, her greatest challenge has been that she cannot consult directly with the potential garden users before submitting her design proposals.

We have had an active exchange of e-mails discussing the design proposals and details for each of the garden spaces, with a more detailed focus on the *Children's Garden*, and the special issues that such a design would entail.

As these examples show, our involvement with these students and their projects is a two-way learning experience. We pass on what we know and they open our eyes to new ideas and creative applications.



Am I Taller Than My Food? by Megan Driscoll

Charting the height of children as they grow is an activity that is familiar to many. To incorporate this tradition into our PlayGarden, we have created a mural that poses the question, "Am I Taller Than My Food?" Painted by the members of the pediatric Explorers and Teen Groups, the mural depicts the growth of common fruits and vegetables—wheat, tomatoes, strawberries, corn, peppers and blueberries. Painted to scale and bordered by rulers, children and visitors to the garden are invited to discover how they size up to what they eat.



Meet Some of the Volunteers in Our Glass Garden *by Mark Sohn*

Christine is a native of Normandy, France. She studied at Rouen, Cambridge, and NYU. In the 1960s, she worked as an Assistant to the French Ambassador to NATO in Paris, and then she spent over 30 years working in New York for the United Nations.

Yasuko is a homemaker who enjoys gardening, Tai Chi, and bread making. As an undergraduate, she studied Japanese literature and later traveled to Western Europe, India, Nepal, and the Philippines.

Zilka: After earning a BA degree from the University of Puerto Rico at the Mayaguez campus, Zilka taught school in Puerto Rico, and more recently directed reading and library programs in Spanish Harlem. Now, when she is not volunteering, she paints dreamscapes and keeps an English-style garden at her home in South Ozone Park.

David: Before retiring, David was the Commissioner for the Department of Buildings in Manhattan and Staten Island. In addition to traveling in Europe, the US, and South America, David enjoys cooking and home repairs.

Bill and his wife have been married 56 years. After retiring from a 26-year career as a high school industrial arts teacher in Brooklyn, he developed another teaching specialty in fishing and marine education. He is also a gardener, potter, fisherman, and tennis player.

Laura holds a PhD in biology and had a long career in academics as a biology professor. In addition to volunteering at the Glass Garden, she enjoys opera, concerts, and theatre.

Lou: After earning a PhD from the University of Chicago, Lou was a Pace University professor of marketing, where he served as head of the Faculty Council. Then, with help from the Glass Garden, he transitioned his career and now leads horticulture activity groups in Hudson County, New Jersey, Senior Centers.

Satloo: After earning degrees from NYU and Bombay University, Satloo did research for chemical companies. Among other things, a goal of her work was to isolate carcinogens from tobacco tar.

Lucille is from Pilgrim Avenue in the Bronx and she opens the Playgarden and then waters the perennial garden. In her spare time she knits and crochets. Years ago, while a student in the Vocational program, Bronx Real, she wrote poetry.

Sebert is from Jamaica. He is a Garden Consultant for the New York Housing Authority, and an inventor. His most recent

invention is a rolling chair for the elderly which he patented.

Nancy knits, crochets, and cares for animals. Before retirement, she was an MSW social worker and sold antiques. "I got interested in the Glass Garden," she said, "because my mother was a gardener, and I wanted to carry on the tradition and do something she would think is important."

Camille worked for Trans World Airlines (TWA) for 23 years and for Sabena Belgium World Airlines. In addition she managed newsstand operations for a publishing firm. When the Six Days' Middle East War broke out in 1967, she was in Kuwait on assignment.

Mark is from Kentucky and returns there after his year-long sabbatical here in New York. He is a psychology professor, foods author, and gentleman farmer. He wrote this column.

Anna Marie enjoys Broadway musicals, metal detecting, stamp collecting, and folk dancing. For seven years, she worked in the foreign service in Chile, Venezuela, Yugoslavia, and Germany, and for 26 years at the Ford Foundation.

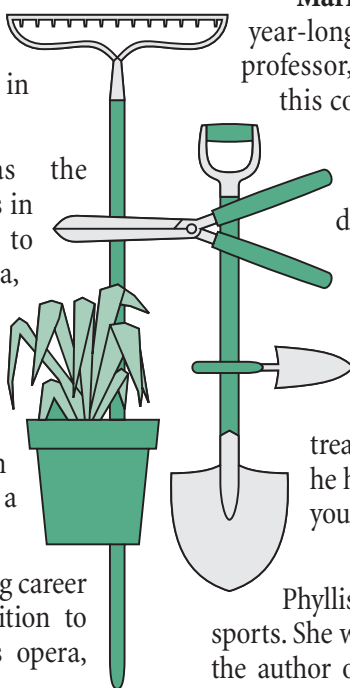
Sidney worked as a salesman and credit accounts manager. He has volunteered at the Glass Garden for twelve years and his goal is "to treat people nice, be open, and receptive." For 30 years he has lived at 34th St and 3rd Ave, and with so many young people around, he says, "I feel like antiquity?"

Phyllis: Years ago as a partner with her husband, Phyllis packaged and published over 250 books on sports. She was also a senior editor at Associated Features and the author of books on women in sports and cheerleading. Both before and after her work in publishing, Phyllis was a social worker.

Yvonne has volunteered at Rusk since 1974. She speaks seven languages and has traveled many times on every continent. She worked as a manager, merchandiser, actress, model, and decorator. Her great grandfather is James Watts, the inventor of the steam engine, the device which precipitated the Industrial Revolution.

Joyce: After growing up in Florida, graduating from the University of Iowa, and working in Chicago, Joyce moved to New York and that was 50 years ago. She worked in retail and advertising before moving on to a radio trade association. She is proud of her volunteer work as a Girl Scout leader, swimming instructor, and sailor.

We deeply regret the passing of two of our esteemed volunteers this year— **Alice Aronson** and **Greta Filler**. Their dedication, talent, and support is sorely missed.



About Our Plant Collections



Our gardens and programs depend, of course, on plants. All of our hands-on educational programs use plants in our collections for programming materials, whether they are propagating, engaging in nature craft activities, studying the cultural uses of plants, or learning how to groom and maintain plants professionally.

An important quality of our collections is their diversity, especially in the Conservatory. Our visitors come from all parts of the world and they are always able to find a “piece of home” there. They enjoy reading the interpretive signs and often want to talk to our staff and volunteers about how our plants grow in their country.

A consideration for us is our limited amount of light. The Conservatory receives no direct sunlight for six months of the year. We have used that as an important educational element for our visitors, many of whom live in dark apartments in New York City. We have an interesting interpretive sign explaining indoor plant light (included in this newsletter). We also explain that if we can grow a plant in our environment, our visitors too can grow it in their apartments.

The third important quality of our collections is that they are considered a “therapeutic” plant collection. In contrast to most garden collections, we want our visitors to interact (look, smell, touch) with our plants. The collections have specific criteria for inclusion in our gardens. We use “the rule of three.” In order for a plant to be included in our collections and displays, it must have three compelling qualities to recommend it. These can include: aesthetics, hardiness and reliability in our microclimates, sensory appeal, educational qualities, non-toxicity, multi-cultural interest, year-round interest, “nostalgia” qualities, attractiveness to wildlife, long-blooming, interesting habit, ease of propagation, culinary uses, economic interest, and use in activity or craft products.

The Conservatory collections are organized in small groupings mainly by climatic regions - tropical groupings in the pond room, African caudate collections near the new world succulents, and so forth. Our insectivore collection is displayed in a terrarium and our orchid collection graces a corner of the main room.

Because our facility is so small, all collections are on display at all times. They are readily available for smelling, touching, and close viewing by all visitors, especially to those in wheelchairs. Our staff and library is available at all times for any related questions.

Glass Garden Annual Community Festival 2007



Mother Nature seemed happy to cooperate as the Glass Garden hosted its 9th Annual Community Festival last June 10th. The cool weather was perfect for our honored guests - the animals from Farm-On-The-Moove at Green Chimneys School in Brewster, NY.

The hit of the day was Lillie and Java, two llamas who thought nothing of giving a kiss to anyone in their reach, here kissing Nancy Chambers. Children played with the baby animals, blew bubbles, planted bean seeds, had their faces and arms painted and watched a magic show. We look forward to new surprises for next year's Festival!

Winter Craft Idea: Icy Sun Catcher *by Gwenn Fried*



The excitement of the holidays and the New Year is followed by the dark, cold days of January and February. Why not take advantage of the cold temperature to capture the beauty of nature in an icy sun catcher?

First you need to collect natural materials. You can use dried or pressed flowers, pinecones, evergreen needles, twigs, cranberries or even small stones or sea shells that may remind you of a summer vacation. You will also need the following supplies:

- Old Shoe Lace
- Water
- 9" Disposable Pie Tin
- Natural materials

Once you have all the supplies pick a very cold day to begin assembly:

1. Fold the shoelace in half. Place the two ends in the center of the pie tin with the loop hanging over the edge.
2. Place the natural materials that you collected in the tin. You can have a random assortment or arrange the materials into a picture.
3. Slowly fill the tin with water and leave it outside to freeze.
4. When the water has frozen, remove the ice from the tin.
5. Hang the ice circle from a tree, fire escape, or balcony in a sunny place so you can see it from your window.

Your family will have fun seeing how the sun shines through the ice. When they start to melt, you will know that the warmth and longer days of spring are soon to follow.

The Glass Garden Preschool Program *by Mark Sohn*

In this program--call it a school of earth science--small children touch flowers (maybe to their cheeks), lift bulbs (and maybe press them into soil), hold stems (however they can), and plant seeds (with a finger or a fist). They use potting soil and watering cans. Rather than learning to fear nature as distant observers, they engage its beauty. Using pine cones, tomatoes, or gourds, this program may be the children's first lesson on the dynamic character of our planet, and as a result they may grow up with an increased respect for its potential.

The Glass Garden is one of the few places in the United States that has a serious, integrated, systems-based preschool education program for children with disabilities. These children may be developmentally challenged, dependent on wheel chairs, or experiencing limited use of limbs. However, our forty developmentally-based lesson plans engage them in manipulating soils, roots, stems, leaves, and seeds. The Garden staff designed these activities to advance the children's cognitive, social, and physical development. For what may be the first time in their lives, the children have the chance to learn about our Mother Earth.

As Megan Driscoll, staff horticultural therapist, says, "To me, what is exciting about working with these children at the Glass Garden is that I can see their growth and

change. They learn the planting steps, learn to distinguish between soil, sand, roots and stems, develop sensory awareness, and engage socially."

The children in the Rusk preschool have cerebral palsy, spina bifida, neurological impairments, brain injury, or other traumas. They have disabilities that affect muscle movement and coordination, and they usually need physical, occupational, and speech therapy. For more than fifteen years the Glass Garden has been serving these children, and in 1999, in cooperation with the publisher, Sapapress, Inc. of Sagaponack, New York, published *Growth Through Nature: A Preschool Program for Children with Disabilities*, distributed by Timber Press, Inc. of Portland, Oregon. (Today the book can be obtained through the American Horticultural Therapy Association.)

Today, when disabled preschoolers from around the city come to the Glass Garden, they have both a lesson-based curriculum and a wondrous outdoor PlayGarden. The PlayGarden includes vegetables, trees, plants, and shrubs as well as a sandbox and water stream. And while you might think of a Botanical Garden as a museum where children don't touch, in this case they are encouraged to snap, mash, plant, pull, sift, and bend or even break. Our horticultural therapists use plants for teaching, and just as the plants flourish in our gardens, so do the children in this preschool program.



Horticulture For Children At NYU Medical Center



At NYU Medical Center there are many, many programs focused on the special needs of children, from before birth until adulthood. Indeed, NYU has been recently designated by a national board as a Children's Hospital. The doctors, nurses and therapists who work on these different units not only have to address the child's immediate needs, but they must also take into account the normal development processes that can be sidetracked by illness, injury or hospitalization.

Horticultural activities are a particularly valuable addition to a child's treatment or wellness plan. First of all, they are fun, and children are easily drawn to working with plants, soil and other natural materials. They also provide a natural, stress-free form of exercise, mental stimulation, and socialization. And, in consultation with the medical staff, horticultural activities can be designed to achieve or support specific physical, mental, emotional, and social objectives. In short, horticulture can aid in the treatment and recovery process and contribute to the child's overall development.

One of the Glass Garden's special areas of expertise is working with children with physical, mental or emotional disabilities, and with those recovering from serious illness or injury. Unique horticulture programs have been developed for children in various hospital units that include both inpatients and outpatients. As you can imagine, these programs cover the entire range of children's needs and abilities.

Our on-going work with children includes the *Rusk Preschool* described in another article, and with the Rusk Institute children undergoing rehabilitation who are integrated into our regular daily multi-generational horticultural therapy programs.

In addition, we offer a weekly horticulture program on the *Tisch Hospital Pediatric Acute Unit* for children undergoing a wide array of treatments including cardiology, neurology, oncology, and reconstructive and general surgery. The plant and flower activities engage both the children and their families in stress-reducing, mood enhancing activities. All plants are kept and maintained by the children.

A horticulture program specifically designed for adolescents unable to leave the inpatient *Psychiatric Unit* offers hands-on projects to engage patients, stimulate socialization, and decrease anxiety and stress. All plants are left with the individuals.

Children come from home as out-patients to the *Hassenfeld Children's Center for Cancer and Blood Disorders*. They often spend hours receiving treatment and the horticulture program we run offers a unique distraction and emotional support as the children master new skills and increase confidence and self-esteem. Many of these children are already familiar with the horticulture program having gardened while in the Tisch Hospital Pediatric Acute Unit.

The *NYU Child Study Center* offers clinical and research programs for children and adolescents with psychiatric disorders. Our small animal care program engages and focuses children while they groom and feed the Garden pets.

For *Rusk Institute's Explorer and Teen Groups*, age-appropriate horticulture and horticultural craft activities are offered for teens and pre-teens as a socialization and normalization program.

Selecting the kinds of horticultural activities that are most appropriate depends on the specific needs, abilities and ages of the group being served. In general, however, horticulture when used as a therapeutic intervention with children focuses on five key developmental needs.

• Physical and Sensory Needs

Horticultural activities provide an opportunity to practice and reinforce new functional skills, fine muscle coordination and mobility, eye-hand coordination and to improve visual and perceptual skills, such as tracking, scanning, and depth perception. All the senses are stimulated by plants, herbs, and flowers used in these activities.

• Social Interaction Needs

Group horticulture activities promote sharing, cooperation, teamwork, verbal and non-verbal skills. Programs can integrate siblings and other family members.

• Emotional Needs

Horticultural activities are non-threatening, yet stimulating, which help to reduce stress and mental fatigue and enhance mood and self esteem.

• Cognitive and Educational Needs

Horticulture activities offer mental stimulation and opportunities for language development, following directions, increasing ability to focus and engage, critical thinking, problem-solving and decision making. Activities can use science skills, math, geography, reading, and art. They also can be appropriate for any child's level of development and ability, from early childhood to post graduate studies.

• Discovery and Wonder

Horticulture activities encourage creativity, fascination, beauty, delight, and a sense of surprise and fun. They also help to develop a concern for stewardship of the earth's resources.

Children often progress through many of the NYU pediatric hospital programs, starting as inpatients on the acute pediatric unit, then perhaps to Rusk for rehabilitation services before going home. Those with cancer and other blood related diseases will often continue their treatment at Hassenfeld as outpatients. The horticulture program becomes a unifying thread among these units and provides a sense of stability, continuity, familiarity and comfort.

Glass Garden Signs

Our Gardens offer a variety of sensory, thought-provoking and educational experiences. One of the tools we use is interpretive signs. The gardens at Rusk are classified as a botanic garden and like other botanic gardens we have a responsibility to exhibit and explain our collections to the public. Some of the interpretive signs we use deal with a specific plant or family of plants, others explore the plant's history and uses, while still others offer intriguing botanical information. The following are some examples:

Which Plants Lose Leaves in Winter?



Deciduous plants are trees, shrubs or vines that shed all of their leaves before the winter or dry season. New foliage will grow in the next season. Various environmental factors such as day length, temperature and light intensity influence the onset of leaf falling.

Evergreen plants stay green and retain their foliage throughout the year by continuously shedding and replacing a few leaves at a time so that the shedding is not noticed. Pine and spruce trees are examples of evergreens with needles. The rhododendron is an example of a broad-leaf evergreen.



Protection From the Sun

Plants wearing sunscreen? Sounds silly but some plants have evolved protection from the sun's damaging ultra violet rays. Some succulents have silver hairs coating their leaves. The hairs reflect some of the sunlight and reduce the effect of drying winds. Many succulents also have a greatly thickened outer skin with a waxy coating that reduces water loss.

Other succulents contain anthocyanin (a red pigment) which, when combined with the green of chlorophyll, gives the plant a brownish-red color. The anthocyanin absorbs heat, thus preventing the leaves from burning in bright sunlight.

Deadheading, Pinching, and Pruning

These are horticultural practices to cut back a plant's tips, flowers or some or all of the branches. *Deadheading* is the removal of spent flowers. It keeps plants looking their best and prevents them from expending energy on seed production. It also often stimulates reblooming.

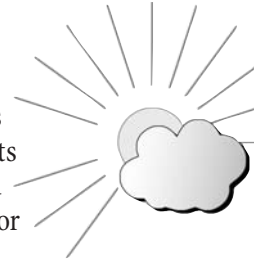
Pinching is the removal of the growing tips—using thumb and forefinger. Pinching helps to create a bushier plant that produces more blooms and is less likely to fall over. A plant is pruned to remove dead or diseased wood, to improve its form, to increase flower and fruit production and generally to promote the plant's vigor. *Pruning* is a horticultural technique that requires tools and training.



Light for House Plants

SOURCES

Light is the energy source for the process of photosynthesis, by which plants produce sugars and starches, fruits and flowers. Natural light may be enhanced-or even supplanted-by artificial light.



The two most important aspects of light for indoor plant growth are intensity and duration. These can change with window direction as well as seasons, and should be considered when selecting house plants.

INTENSITY

Intensity is the degree of brightness and is measured in foot-candles. One foot-candle is the amount of light cast by a candle on a surface one foot away. Outdoors, the summer sun at noon may produce 10,000 or 12,000 foot-candles. Less than 50% of outdoor natural light, however, passes through a window.

Plants in a sunny window may receive only 4,000 foot-candles or less. The intensity will continue to drop sharply a few feet into the room where the average light may range between 100 and 10 foot-candles. Usable light does not generally penetrate much beyond 15 feet from the glass.

DURATION

Window exposures may provide three different ranges of light intensity-direct, indirect and low. Direct exposures gives full light intensity for at least 5 hours a day. This will occur mostly in south-facing windows with no obstructions. Direct light promotes the flowering response in many plants and is necessary for longer lasting blooms.

Indirect light areas may receive some direct light for a few hours each day, as in east- and west-facing windows. Low light exposure receives no direct light. Most of the lowest light plants still require about 150 foot-candles of intensity.



Seasonal changes will affect both the duration and intensity of light. In winter, windows may receive more direct light, but the intensity will be lower. Summer sun shining directly through windows can easily burn plants because of its intense heat.

Yes, I'll help cultivate your gardens.

NAME: _____

ADDRESS: _____

E-MAIL: _____ PHONE: _____

Enclosed is my check for \$_____.

Please charge \$_____ to: AMEX VISA MC

Account # _____ Expiration Date: _____

Signature _____

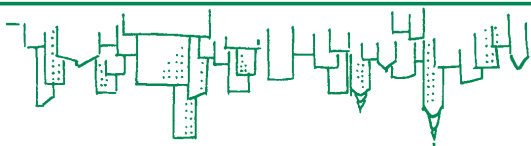
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