



## The Seasons of the Mississippi

by William M Cook

Presumably everyone who reads this newsletter has at some time walked along the gravel paths at the lower end of Munsinger Gardens, and taken a leisurely swing on one of the several that are down there. There is much to enjoy in that area; while the formal sunny beds up along the street are spectacular, my favorite parts of the Gardens are down the hill, where I appreciate the tall trees and the hostas and other perennial gardens. Still, I bet many people don't give much conscious thought to the nearby Mississippi River, which is one of the defining and unique features of the Gardens. This is the first in what will probably become an intermittent series of articles on the Mississippi, its ecology, history, and relationship to the Clemens and particularly the Munsinger Gardens.

It is easy to forget that we live very close to one of the major rivers of the world.



Personally I try to appreciate this; living on the east side near the Gardens and working at Saint Cloud State, I walk back and forth across the University Drive bridge on nearly a daily basis. The river itself is a barometer of the seasons, and I love watching it change through the year.

In the spring, the water is high and fast-moving due to melting snow and the first rains of the season. Large logs are washed down river, sometimes temporarily sticking out of the water at odd angles; one a few years back we called the "Loch Ness monster." When my son was smaller we would walk down to the observation deck on the east side (near the greenhouses) and if water was gushing over the dam, he would shout "The dam is ON!" There is a brief rush of migratory birds heading north up the river in April and early May, and in cold springs loons can be found using the area right next to the gardens as an overnight rest stop. If you catch it just right, you can see flocks of hawks, vultures, or pelicans circling while riding thermals on the way north.

Soon, the migrants are past and flotillas of baby mallard ducks appear. As the summer goes along the water level usually drops, and if it's a dry season by September I can wade across below the dam and only get wet up to my thighs (take into account that I am unusually tall, and the current is still strong in places). More and more of the rocks and sand bars become visible, and the

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## What's Up in the Gardens? A Guided Tour of Clemens Garden

by Joan Andersen

I have visited the Gardens quite a few times this summer and I love to observe the changes over the season. My most recent visit was a quick tour with Gardens Supervisor Nia Primus on July 21—the hottest and most humid day of the season so far. I wanted to see the highlights of each of the garden areas in Clemens Gardens. These Gardens contain a lot of annuals, and the design, color schemes, and plant choices are completely redesigned each year.

As you pass from one area of Clemens Gardens to the next, watch how the colors change but still flow from one garden to the next.

The Rest Area Garden features a prominent row of *verbena bonariensis*. The purple flowers resemble lollipops on sticks and stand up high above the pink "Magellan" zinnias planted next to them. These plants, along with many

## Is the MCBS Photo Contest Open to Everyone?

Yes, everyone who visits Munsinger Clemens Gardens is invited to submit photos for the photo contest. Last year out-of-town visitors from Maple Lake, Kokato, Rosemount, Buffalo, Milaca, William, and Foley submitted entries. Of course, photos from people living in Saint Cloud, Sartell, Waite Park, and Sauk Rapids are also appreciated.

Our two age groups make everyone eligible: youth-18, and adults. A new award will be introduced this year: "Best of Show" will be chosen from the entries.

All winning photos will be announced at the Photo Contest Awards Ceremony, November 16, 3:00 pm, at the Lake George Municipal Complex, 1101 7th Street So. Winners will receive cash prizes and the honor of having their photos displayed at various public sites for one year.

Peter Happel-Christian will judge the entries again this year. He is employed by Saint Cloud State University, a member of the Art Department, and teaches classes in photography.

Please check our website, www.MunsingerClemens.com, for rules and entry forms. Entry forms are also available at the Gardens Gift Shop in Clemens Gardens.

Visit our website: [munsingerclemens.com](http://munsingerclemens.com)

Check out our Facebook page at



Munsinger Clemens Botanical Society.

MCBS newsletter is published four times a year. The next issue will be in December. Articles, comments, suggestions, or address corrections are welcomed.

**Coordinator & Editor**  
Donna Gorrell • 252-8834  
dgorrell@stcloudstate.edu

**Layout & Design**  
Jill Lucas Design • 743-4471  
jill@jillucasdesign.com

[www.MunsingerClemens.com](http://www.MunsingerClemens.com)

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## What's Up in the Gardens?

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other annuals, fit into the inviting color palate of pink, purple, and magenta. There are several giant plants featured in this garden to give it vertical interest. "Teddy Bear" sunflower is a shorter cultivar (for a sunflower) with very large leaves; it is just setting buds that will bloom in late summer. The Cardoon plant has huge greenish gray serrated leaves and is just grown for its dramatic foliage. Also, look for the lime-green leaves of "Jack's Giant" elephant ear. *Agastache* "Pink Pop" is planted because it attracts sphinx moths.

The Formal Garden has a great color scheme featuring burgundy, lime green, and coral. Plants grown only for foliage look great all season and never take "time off" from blooming. Look for sun coleus in shades of green and coral including "Fishnet Stockings," "Dark Star," "Mariposa," and "Mainstreet River Walk." Another attractive plant is *Acalypha* "Bronze Pink" which has large shiny bronze red leaves. A wonderful coral dahlia, "Alamos XXL," is featured in this garden. *Alternanthera* "Red Threads" is planted as an edge plant and the fine leaves of this plant are getting bushy in the summer heat. "Sophistica Lime Green" and "Crazytunia Bitter Lemon" have ruffled flowers that contrast well with darker foliage plants. This year, Nia is testing five kinds of black petunias, and several of these are planted here. This garden proves that you can have lots of bright color with foliage as well as flowers.

The Perennial Garden contains an impressive collection of perennial plants, and on this day the lilies and day-lilies were the stars. Another perennial in full bloom was *leucanthemum* "Sunny Side Up"—a sturdy pure-white daisy with a yellow center. Annual plants are added to ensure that the garden is always colorful and to make it interesting for visitors by changing the look each year. A nice annual grass found here is

*pennisetum* "Regal Princess," a purple grass that grows to about 36" tall. Nia mentioned that there are "volunteer" milkweed plants in this garden and that the staff leaves them for the Monarch butterflies. The staff is sure to deadhead the milkweed flowers so they don't self seed all over the Gardens!

The Treillage Gardens on the top of the hill feature four color-themed gardens. The yellow garden has a lovely planting of *agerantherum* "Butterfly." The Gardens staff really likes the "Moonstruck" marigolds because they are always flowering and the plant as a whole is very attractive. A visitor favorite is the "Cassia" or popcorn plant. This plant has shiny black buds opening to spikes of yellow flowers. It is in the legume family and the foliage resembles clover. The red garden has a large planting of salvia "Hot Lips." This plant is a red and white bicolor and is a hummingbird favorite. Castor bean plants provide a large dramatic back-drop to the red garden. The blue garden features "Carpet Blue" petunias interplanted with a darker blue double petunia for a nice contrast. Another plant I liked was salvia *farinacea* "Sallyfun Blue Emotion," which was tall and had more blue color than similar salvias. The purple/pink garden contains "Pink Sunation," an impatiens that takes sun and is resistant to downy mildew.

When walking through the Gardens, be sure to check out the urns and other containers. Nia pointed out *pennisetum villosum* grass, which is also planted in several gardens. If you pass by the urns in the Perennial Gardens on the way to the Treillage, check for the morning glories planted in the urns—they are just starting to bloom.

Nia and the Gardens staff have done a wonderful job of designing the Gardens and choosing interesting plants. We had a cold and rainy spring for planting followed by summery weather. Favorable growing conditions plus the skill of the gardening staff means that the Gardens are looking fantastic this year.

## Reflections on "Art Fair in the Gardens"

by Joan Andersen

Everyone planning an outdoor event worries about the weather! In 2013, our artists, organizers, visitors, and Gardens staff soldiered on through a very hot and humid day. In 2014, we all rejoiced in the beautiful summer weather—just enough heat and not too much humidity for Art Fair in the Gardens. The conditions were perfect for shopping and visiting with the artists while listening to music and having something to eat and drink.

The most asked question about the flowers was "What is that tall purple flower growing near the gift shop?" It is verbena bonariensis, also known as Brazilian vervain. This plant blooms all summer and is attractive to butterflies and other insects. The leaves are small and the stems are sturdy, so its airy form gives height in the garden, blending well with other flowers without blocking the view behind it.

It grows as a perennial in warmer climates. In Minnesota the plant will be killed by frost in the fall but will reseed itself during the growing season and the seeds will sprout in the spring. If this happens, excess seedlings can be removed or moved to another place. Seeds for this plant can be bought and started indoors, and sometimes plants can be found at garden centers.

Many of us thought that the Gardens were the most beautiful we had ever seen them. I think that "Art Fair in the Gardens" must have the best location of any art fair anywhere. Artist booths are set in the gardens—we don't mind if you walk on the grass. Many people found a peaceful place at the gazebo or a bench near the river to sit and enjoy a meal and a beverage and listen to music. I can't think of another art fair where you can shop for high quality art for your home and garden while being surrounded by beautiful gardens and serenaded by talented musicians.



## Photography in the Gardens

January 1— November 7th, 2014

### > Prizes

\$50 1st place **Adult** winner in each category  
 \$20 2nd place **Adult** winner in each category  
 \$10 3rd place **Adult** winners in each category  
 \$50 1st place **Youth-18** winner in each category  
 \$20 2nd place **Youth-18** winner in each category  
 \$10 3rd place **Youth-18** winners in each category  
 All winners will receive Award Certificates.

### > Categories

**Landscapes** (garden scenery)  
**Hardscapes** (decorative features in the Gardens)

1st, 2nd, and 3rd place winners will be chosen from both age groups and each category.

Any visitor to the Gardens is eligible to enter.

### > Submission Fee

\$10 for adults per photo  
 \$5 for youth-18 per photo

Maximum of 3 entries per photographer.

### > Rules

- Tripods may be used.
- Photos will be returned to photographer.
- Photographer retains copyright of photo.
- Use of the photo is granted to MCBS and credit will be given to photographer.

### > Entries Due

**November 7, 2014** from 4:30 to 6:30 p.m.  
**November 8, 2014** from 9:00 a.m. to 3:00 p.m.  
 at the **Lake George Municipal Complex**  
 1101 7th Street South, St. Cloud, MN  
 Winners will be notified November 12-14, 2014.

### > Awards

**November 16, 2014** 3:00 p.m. a Public Reception will be held at **Lake George Municipal Complex** to present awards.

Winning photos will be on display for the following year and then returned. Other photos may be picked up at the awards ceremony or at Lake George Municipal Complex November 17-21, 2014.

Download the entry form from our website  
[www.munsingerclomens.com](http://www.munsingerclomens.com)

## Potter's Legacy

In time, she expanded. After she married her solicitor William Heelis in 1913, William helped her to purchase more property. She bought Castle Farm across the road from Hill Top Farm and Courier Farm, which had fruit trees. She became a preserver of fruit, with jams and jellies and marmalades. She moved permanently to the country and set aside obligations of London society in exchange for life in the country. Her wardrobe became a straw hat, a woolen jacket and skirt, and clogs or boots for walking in mud. In 1923 Potter, now Mrs. Heelis, bought Troutbeck Park Farm, which was over two thousand acres. She paid farm managers and a sheep expert to rebuild the herd. She was so successful that in 1930 she was elected president of the Herdwick Sheep Breeders' Association. In the same year she acquired another huge estate, Monk Coniston.

Throughout the years Beatrix had remained involved with the Reverend Rawnsley's efforts to preserve the Lake District, historical sites, and natural beauty around England. Beatrix and William arranged to bequeath all of their real estate to the National Trust that the Reverend had founded. Public access to the views, the lakes, and hills are due in great part to the legacy of Beatrix's writing. Beatrix and William remained happily together in the Lake District until her death in 1943. Her garden remains open to visitors, a living link to Beatrix Potter and her lifelong interest in plants and gardening.

If you are interested in knowing more about her gardening life, I recommend *Beatrix Potter's Gardening Life: the Plants and Places That Inspired the Classic Children's Tales*, by Marta McDowell; and *Beatrix Potter: a Life in Nature*, by Linda Lear. You may want to read her girlhood diary, *The Journal of Beatrix Potter 1881-1897*, which has been transcribed from her code writings by Leslie Linder. You may also wish to see the video that was released in 2006 starring Renee Zellweger. *Miss Potter* tells the story about Potter and her struggles to become a published author in Victorian England.

To give additional support to Music, ArtFair, or the Gardens, complete the form below and mail to:

MCBS, PO Box 7594, St Cloud MN 56302

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Or visit our website to give at [www.munsingerclomens.com](http://www.munsingerclomens.com)

## Gardens Known and Loved by Beatrix Potter

by Idella Moberg

### London

Beatrix Potter was born July 28, 1866. Her parents' first family home was at No. 2 Bolton Gardens, London, a newly built four-story terrace house in a South Kensington neighborhood. Her grandparents were newly rich, having made their fortunes in Manchester's cotton industry. As a child Beatrix played in the back garden. It was walled for privacy and gated for access. A gravel path surrounded a rectangular lawn. Along the wall, shrubs grew in a bed that was edged with brick set in a sawtooth pattern. A rose and other climbing vines were trained on the wall.

Across the street from No. 2 was a garden square. This was exclusive to residents who paid a garden tax covering their share of the upkeep. Residents received a key to its iron gate. Young Beatrix and her little brother Bertram went there with their governess, Nurse MacKenzie. Nurse MacKenzie also took the children to the Royal Horticultural Society's Horticultural Gardens, where the large glass conservatory was warm and tropical in winter, and musicians played from cast-iron bandstands on concert days. Across from the Horticultural Gardens Nurse MacKenzie took the Potter children to Kensington Gardens. This Royal Park was laid out in the 17th and 18th centuries in symmetrical Dutch style. Avenues of trees radiated out from the Round Pond. A natural-looking lake, Serpentine, provided a touch of English landscape into the garden. It was in these gardens that Beatrix and her brother walked and played as young children.

Beatrix's love of nature was fostered by spending time throughout her life in gardens. Her parents indulged her love of animals by allowing her to keep a menagerie consisting variously of mice, frogs, lizards, birds, a dog, a hedgehog, a bat, and rabbits. Later, they encouraged Beatrix's artistic efforts as she drew and painted subjects in the garden. Her father took her to art galleries and introduced her to painters. He passed on his love of photography to his daughter, which was useful to her as a painter. As a child she drew plants from books in the Potter library and later she took art lessons.

### Scotland

Each summer while Beatrix was growing up, her family packed up the dog, the servants, the carriage horses, the children and their current menagerie, and boarded a train to Scotland. Her father rented a large house for the summer, where they could exchange the stress and grimy heat of London summers for freedom to romp and explore the countryside. For about eleven summers in a row they visited the house called Dalguise, on the river Tay in Perthshire. It was at Dalguise that Beatrix learned to observe plants and insects with an artist's eye for detail.

### Herefordshire

Beatrix's paternal grandparents lived at Camfield Place in Herefordshire. They purchased the three-hundred-acre estate north of London the year she was born. Her grandfather employed fifteen gardeners to tend the park, the walled garden, flower beds and green houses. It was the place Beatrix loved best. At Camfield she could climb trees and look for birds' nests in a landscape designed by the famous landscape artist Capability Brown.

### Lake District

One summer, after spending eleven summers in Dalguise, the Potter family found that the house was not available. Instead they rented a place in the English Lake District, at Wray Castle. The Castle was built in the 1840s, designed in neo-Gothic style. It had towers and a picturesque garden. The Reverend Mr. Rawnsley, the Potters' neighbor at Wray, had a passion for preserving the landscape of Lakes. Sixteen-year-old Beatrix immediately fell in love with the beautiful countryside. Later in life she, like the good Reverend, also championed the cause of preserving the landscape.

The Potters vacationed in other landscapes: Salisbury at Cathedral Close, on the Cornish coast, and in Devonshire. Beatrix photographed and drew and painted the landscapes and outdoor spaces. She described the gardens she visited and viewed them with a critical eye. Her travels brought her to a serious study of plants as compared in different sites. In her twenties, Beatrix studied botany, collected insects, dug for fossils, and studied animals. She studied and painted fungi.

### Books and Gardens

The vacation homes that the Potter family rented in summertime provided settings for the many books Beatrix Potter wrote and illustrated. Her first book, *The Tale of Peter Rabbit*, began in a letter she wrote to the little son of a friend. Her friend loved the story and suggested she publish it. Her illustrations in her many books demonstrate that even though she had no garden of her own, Miss Potter had absorbed lessons from gardeners she'd met over the years.

### Hill Top Farm, Near Sawrey, Lake District

Beatrix became a gardener when she was almost 40 years old, when she'd bought her first property, when her fiance died suddenly leaving her grief struck, and when she had received income from her books and an annuity from an aunt. She purchased Hill Top Farm for a summer residence. It was therapeutic for her to plant a garden. Friends visited with gifts from their own gardens, and she was happy to reciprocate. Beatrix redid her garden and added onto the house. She did not choose an estate house with a grand landscape. Rather, she chose a working farm with a cottage garden. She used stone from a quarry on her own land and hired local craftsmen to fashion her garden in the Arts & Crafts style.

## Japanese Beetles Are Coming? Are Here?

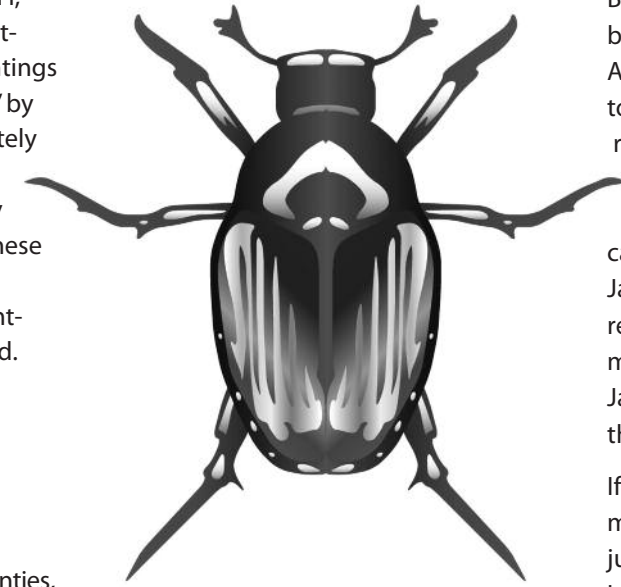
by Carl Hoffman

A few weeks ago, my neighbor and I, both wearing white shirts, were outdoors talking about our shrub plantings when we were suddenly "attacked" by dark-colored insects. She immediately asked me what kind of bees was bombarding us. I told her that they were not bees but were false Japanese beetles, and we soon found them feeding on nearly every largely light-colored flower in the neighborhood. I can assume that many of you can relate because this is another year when this pest ravaged flowers for a couple of weeks.

Beth Berlin, Extension Horticulture Educator in Stearns and Benton counties, said she had many calls about the false Japanese beetles, and specimens were brought to the office for her to identify. **What is unusual, and frightening, is that a specimen brought in by an area gardener is that the insect was really a Japanese beetle.** Although they have been active in the twin cities and surrounding area for several years, this is the first time they have been found this far north.

These beetles are broadly oval and about  $\frac{3}{8}$ -inch long with a bright emerald-green head and prothorax (the area directly behind the head) and shiny bronze-colored wing covers. **An important distinguishing feature is the five small white tufts of hair along each side of the abdomen and two larger white tufts on the tip of the abdomen.** The false Japanese beetle's head and thorax are a dull metallic green with brown wings and no white tufts on the abdomen. Whereas false Japanese beetles are usually gone from the gardens by the end of July, Japanese beetles may be found in gardens and lawns until the end of August or later.

Japanese beetle adults feed on over 300 different plants, commonly eating the



foliage of rose, grape, linden, birch, crab apple, cherry, birch, Norway maple, mountain ash, and willow. They skeletonize the foliage, eating the leaf tissue between the veins. They particularly like to feed on plants in sunny areas and typically will start eating leaves at the top of plants and work their way down. The adults also commonly eat flower blossoms, like rose. Japanese beetle grubs are also pests feeding on the roots of turf grass.

I am sure that the question many of you have is "What now?" First of all, it is possible that the one or two specimens found in this gardener's yard were incidentals that were brought in on a plant or in the soil of a plant in the grub stage and have not yet become established. It is very important that we all monitor our yards and gardens and positively identify any suspicious insects. This can be done **by bringing the specimens under question to the Stearns County Extension Office for identification.**

Don't be tempted to use pheromone traps, commonly sold as "Japanese

Beetle Traps," to control the Japanese beetles in your yard and garden. Although they can capture what appears to be an impressive number of beetles, research has proven that these traps attract more Japanese beetles into the area than they actually capture. You are likely to see more Japanese beetles on your plants as a result. Pheromone traps are a useful monitoring tool to determine if Japanese beetles are in the area but they are not meant to control them.

If you are seeing only a *small* or moderate number of Japanese beetles, just handpick them. Pick them off or knock them into a pail of soapy water. This is more effectively done in the evening because Japanese beetles are active feeders during the night, but anytime you can do it will help. Remember to check your plants regularly. Japanese beetles can be active through September (even into October if we are enjoying a mild fall).

For more information on the Japanese beetle and both low-impact and insecticide control, go to [www.extension.umn.edu](http://www.extension.umn.edu), click on "garden," and write "Japanese beetle" in the search box. You will find much excellent up-to-date information from Jeff Hahn, University of Minnesota Extension Entomologist and other authorities.

The best thing we can do now is to diligently monitor our yards and gardens for this unwelcome invader so that we can eliminate them before they become established area wide. As William Shakespeare wrote, "Unbidden guests are often welcomest when they are gone."

## White Mold – The Problem and a Solution

by Carl Hoffman

As had been the pattern for a number of years, spring 2010 found me planting my annual flower border, which contained about 500 annual plants. The annual flower of 2010 was ‘Twinny Peach’ snapdragon and, to satisfy my penchant for growing new plants, I decided to use this snapdragon with ‘Merlin Blue Morn’ petunias, ‘Evolution’ blue salvia, and ‘Rocket’ snapdragon with blue ageratum for edging. Although the peach snapdragons were actually more of a school-room buff than the peachy yellows and orange I was expecting, the border looked presentable until late July and early August, but then the plants began to decline rapidly.

By mid-August there were a few straggly surviving plants, and many of my friends asked me if my garden had been sprayed with a chemical. These plants had been damaged by white mold, *Sclerotinia sclerotiorum*, a fungus disease that affects over 360 species of plants, including annual flowers, vegetables, perennials, and farm crops, particularly bean crops. For me, this all started in my border about ten years ago when my beautiful Coral Magellan zinnias began to wilt and die. I brought some color back into the 2010 border by pulling and destroying all the infected plants and planting some bargain chrysanthemums I’d found at a swap meet.

Symptoms of this disease include tan to off-white colored stems in a section close to the base of the plant. The stem above the discolored area can be a normal green color and the roots can be healthy colored. Fluffy white cotton-like fungal growth can be seen in the area of the discolored stem. Eventually the fungus will rot through the entire stem and the plant suddenly wilts and dies. Upon close examination, hard black fungal resting structures called sclerotia can be seen clinging to the outside of infected stems or embedded inside dead stems. Sclerotia are the resistant form in which

the disease survives winter. It is, therefore, very important to destroy all infected plants by burning or burying them, being careful not to shake the pulled plants in the garden.

There is no chemical that will rid the garden of the disease, so the control strategy must involve a change in cultural practices. Because the sclerotia need moisture to start an infection, practices that reduce humidity and allow plants to dry rapidly will deter development. Avoid overhead watering, and space plants so that air can move around the plants. In an attempt to achieve a mass of color, I had planted my plants close together in nutrient rich soil, and because of the location and size of the border I had to overhead

water. In other words, I provided the ideal environment for the development of white mold. Because I planted susceptible plants in the same spot each year and did not correct my cultural technique, the disease continually increased until it culminated in the mess of 2010. I had fallen into the old “maybe it will be better this year” regimen.

The only strategy left, other than to abandon the site, was to select plants that are resistant to the disease. That is no easy task! After many phone calls to Michelle Grabowski, University of Minnesota Extension Plant Pathologist, seeking a solution to my problem and asking for a list of resistant plants, she asked if I would consider using my garden as a test site for a white mold

resistance project that she was conducting. I certainly had an adequate source of sclerotia inoculum in my soil! I readily agreed to offer her my garden for a test site in 2011.

### Conclusion

There are a few highly resistant plants, but with proper cultural practices, some of the plants with moderate or even low resistance to white mold will perform satisfactorily. For example, in the border of 2011 (which was planted for me), the master gardeners used both Profusion Cherry Zinnia and Tidal Wave Hot Pink petunias that were spaced correctly and they performed quite well. The mainstays in the border were both green and burgundy sweet potato vines and Tea Cup elephant ears. The greatest problem was some aggressive sweet potato vines that were unwilling to share the space! The Tea Cup elephant ears were beautiful.

### Accessibility in the Gardens

Clemens Gardens is completely accessible, with handicapped parking and access located by the Virginia Clemens Rose Garden. There are steps located from the White Garden to the Perennial Garden and the Perennial Garden to the Treillage Garden. To access these gardens, visitors in wheelchairs may use the path that runs along the outside of the Gardens.

To access Munsinger Gardens from Clemens Gardens or vice versa, use the sidewalk at 13th Street SE. Constructed in the 1930s, Munsinger Gardens have limited handicapped accessibility, but visitors can park in our public parking lot and access Munsinger on the path that runs along the Mississippi River. —Nia Primus, Gardens Supervisor.

## The Seasons of the Mississippi

*Continued from page 1*

Beaver Islands are almost accessible by dry foot. In hot weather sometimes algae grows on the upriver side of the temporary dock put out by SCSU crew teams. In the fall it is pleasant to look across the river and watch the deciduous trees change color and drop the spent leaves into the river, thereby providing for a large guild of detritus-feeding insects for the rest of the year.

My favorite season for watching the Mississippi is winter, defined for me by the interval when ice appears on the surface, between roughly late November and March. On the first calm nights down in the teens a thin film of ice appears and then comes and goes depending on daytime temperatures and wind patterns. Eventually the ice becomes stable and creeps southward toward the dam, with the last open water just above the lock. Groups of waterfowl gather just beyond the leading edge of the ice, and crows walk along just on solid footing. In the mornings you can see rings of ice which have been added during the night. Sooner or later it snows and a perfectly flat blanket of snow is in place from bank to bank; this is a special Minnesota view, rarely seen in many parts of the country.

During the coldest part of winter the Mississippi along Munsinger Gardens is quiet; ducks, geese, and swans huddle below the dam. Occasionally a lone bald eagle lands on the ice. On the coldest mornings of the year, fog called “river smoke” forms as water from the 32-degree water evaporates into air sixty degrees colder. Rime ice from fog coats nearby trees, creating a winter wonderland look. Footprints appear across the river, tracing the tracks of foraging animals and foolhardy students. On sunny days in late winter, snow on the surface of the river partly melts, creating small lakes on top of the ice which then freeze again, creating a marbled look.

Finally, as days regularly go above freezing in early spring, the big thaw happens and large cracks appear in the now mostly snowless ice. A large channel opens north to south; in most years recently, that forms off the east bank near Munsinger Gardens, though in 2014 it formed on the west side. Large sheets of thin ice, sometimes as large as a football field, break off and try to head south. For a couple of days icebergs flow down the river and over the dam, and then the waterway is clear except for lingering ice along the east bank. It is spring again, and Garden workers are already planning the flowers of June.

So, have you noticed any of this happening within feet of Munsinger Gardens? If not, the next time you are visiting, you should walk and look. And don’t forget most of the year that is outside Memorial Day to Labor Day, either! A few years ago, after a sleet storm in early spring, ice covered all the surfaces along the lower river walk. A jungle of icicles dripped off every tree branch overhanging the river, many connecting directly to the mostly frozen river below. Every one of those icicles eventually fell into the Mississippi, and started on its way over 2000 miles to the Gulf of Mexico. The Mississippi River is not just near Clemens and Munsinger Gardens, it is part of the Gardens. Be sure to visit them both together.

Visit our website: [munsingerclemens.com](http://munsingerclemens.com)



Check out our Facebook page at [Munsinger Clemens Botanical Society](https://www.facebook.com/munsingerclemens).

### The Test

I sent Michelle a diagram of my garden bed giving the shape and dimensions, and with the help of Julie Wesienhorn, University of Minnesota Extension Educator, she made a planting plan. Following is a list of plants that were included in the test and the results:

Common name and variety	Botanical name	Resistance Level
Canna — Tropical White	Canna	high
Elephant Ear — Ruffles	Colocasia	high
Sedge — Toffee Twist	Carex	high
Zinnia — Profusion white	Zinnia	susceptible
New Guinea Impatiens Sonic red	Impatiens	high to moderate
Scaevola — Whirlwind White	Scaevola	susceptible
Sweet flag — Ogon	Acorus	high
Pentas — Graffiti mixed	Pentas	moderate
Moss Roses — Sundial (4 colors)	Portulaca	susceptible

Because there were not enough plants to fill the space and I could not tolerate all the bare soil, I added the following plants to the test site:

Dianthus — Red	Dianthus	high
Canna — Tropical Rose	Canna	high
Cosmos — Sonata Pink	Cosmos	susceptible
Zinnia — Profusion Cherry	Zinnia	susceptible
Geranium — Caliente Hot Coral	Geranium	moderate to high
Alternanthera — Joseph’s coat	Alternanthera	high
Petunia — Carpet white	Petunia	susceptible

From personal experience, I would add the following to the list:

Alyssum — Snow Crystals	Lobularia	susceptible
Snapdragon — Twinny Peach (The old favorite, Rocket, has good resistance)	Antirrhinum	susceptible
Ageratum — Blue Danube	Ageratum	moderate to low
Blue Salvia — Evolution, Victoria	Salvia	moderate to low
Sweet potato vine	Ipomoea	high