In this issue		
Pa	age	
What's Up	1	
Winter Color Revisited	1	
The family Cactaceae	1	
Rest Area Garden	2	
Nia's Picks & Pans	3	
In the Rose Garden	3	
Weeds • Book Review	3	
Growing Amaryllis	5	
MCBS Events	7	
Fun Facts on Root- Beer Floats	8	

What's Up in the Gardens

by Joan Andersen We all have our memories of a wonderful year in the Gardens. Some days I just stopped for a quick visit to talk to Deb Keiser as she worked in the Rose Garden. Other times I showed the Gardens off to friends from out of town. My favorite day was Art Fair in the Gardens on July 21. We lucked out with a perfect summer day, the flowers were at their peak of beauty, and, if that wasn't enough, the Gardens were full of visitors enjoying the art, music, and flowers. Many community members enjoy regular "Music in the Gardens" Sunday concerts and their weekly root-beer float.

Now the season is over. Staff gardeners finished fall cleanup, covered the perennial beds with straw for the winter, and worked their last day November 4. I recently visited with Nia Primus, Garden Supervisor, and Deb Keiser, Rose Specialist, to talk about the 2011 season and look forward to 2012. Nia stated that she is evaluating new selections not only for their beauty but with an eye to low maintenance, especially to reduce the amount of deadheading done by the staff to keep the flowers looking good. Continued on page 2 • What's Up

Winter Color Revisited by Carl Hoffman

As I looked out the window on the afternoon of the first snowfall of the season hoping that I had winterized all my plants properly, I became aware of all the color that was suddenly showing up in the landscape. The somber browns and tans that had been part of the landscape for nearly two months have been replaced by a canvas of white that is enhanced by the wine-red fruit of the "Prairie Fire" flowering crabapple, the scarlet berries of the cranberry viburnum, the orange-red hips of the Pavement Roses, along with the vibrant red of a male cardinal making his first appearance of the winter at the bird feeder.

As I was admiring this transformation, I was reminded of an article I wrote for this newsletter about six years ago entitled "Winter Can Go Beyond White and Green." In this article I had listed and described trees, shrubs, and perennials that will add interest and beauty to our winter landscapes in addition to the many evergreens. I ended that article with a cliché stating that I had just scratched the surface. Now, I am going to revisit that article and do a little more scratching to uncover new introductions as well as some old favorites that will make our winter landscape much more exciting than the monotony of white and green. *Continued on page 6 • Color*

The family Cactaceae: General Thoughts

by William M. Cook

In the last newsletter I gave a general introduction to cacti and succulents. In this article I would like to introduce the true cacti, their anatomy, distribution, and natural history.

The term "cactus" specifically refers to plants in the family Cactaceae, which is a group of plants familiar to most people. There are somewhere in the neighborhood of 1800-2000 species of cacti in the world. Botanically, cacti can be identified conclusively by the presence of an areole, which is a disklike structure out of which spines, hairs, flowers, new growth and fruits can all grow. Other noncactus succulent species such

as Euphorbias may produce spines and many of these other characteristics, but they do not grow out of an areole. True cacti also have flowers with inferior ovaries—that is, the ovary is underneath the other parts of the flower. (Picky details of flower structure are often critical characteristics for identification of species, genera, and families.)

As the majority of cacti naturally live in desert environments, Continued on page 4 • Cactus

A Friend of the Gardens

Rest Area Garden by Carole Pike

This is the third of a series of articles on the history of the Clemens Gardens.

In the early 1990s, a stretch of mud connected the Rose Garden and the Formal Garden, and both Clemens Gardens were thriving and attracting visitors. William Clemens, benefactor of the Rose Garden, noticed from his house across the street that people with children were asking the neighbors if they could use their restrooms. He and his wife, Virginia, saw a need for a restroom in the area. So he enlisted contractor Jerry Schonberg to build a fully accessible structure on the west side of the lot connecting the two existing Gardens.

The new building was admired by Saint Cloud Nursery Supervisor David Morreim, but he wondered what to do with the area in front of it. He had worked with Robinson Iron of Alexander City, Alabama, on the Rose Garden fountain. The company specializes in cast-iron reproductions and custom casings as well as architectural metalwork and historical restoration. When Morreim sent them a site plan, they suggested a grand entrance that would accommodate heavy traffic and include paths connecting the Rose and Formal Gardens. The design included a center circle with brick paths radiating from it.

When the Minnesota League of Cities met in Saint Cloud in June of 1992, the new Garden was partially completed. Mayors and city administrators from around the state signed up for bus tours in the city, including Clemens Gardens. In addition to the Rose and Formal Gardens, the visitors saw the rest room, the brick paths, and benches and urns from Robinson Iron. In addition, Morreim had planted 250 pink geraniums in the circle. The next year Robinson Iron installed the gates and semicircular fence that make up the grand entrance, and the Rest Area Garden officially opened in the spring of 1993.

Five years later the Clemenses and their daughter and son-in-law, Randy and Mary Sue Potter, along with the Park Department, chose a fountain for the center of the Garden. Virginia Clemens wanted it to be large but beautiful, Morreim recalled. Robinsons wanted everything in the entire Garden to match. The 24-foottall fountain combined elements from several different fountains. Bathing boys, copied from European sculptures, rest on the lower level. Cranes spout water from a perch above them. A world-famous sculpture by Antonio Canova inspired the figure of Hebe running with her cup to the table of the gods. Decorative shells and scrolls complete the fountain. The granite came from Brazil, chosen because the black color matched the patina of the cast iron.

"We like to plant something different each year to keep it fresh."

As a result of the brittle nature of the cast iron, the project required special skills. Workmen and Wayne Fuller, the architect, traveled from Robinson Iron to install the fountain. During its first year Morreim and the staff had to work on regulating the water. It splashed onto the paths and made the red brick slippery. The path has since been replaced with a nonslip surface.

For plantings Morreim chose plants in Virginia Clemens' favorite colors. He planted pink, white, and lavender



cleome in the center. "For such a flat place we wanted height," he said. He added blue salvia and edged the border in wax begonias and dusty miller. Along the walk he planted groups of dusty miller, ageratum, and heliotrope.

Nia Primus, the current Gardens supervisor, continues the tradition of using pastel colors. She likes to use the newest types of plants available that have been proven hearty. "We like to plant something different each year to keep it fresh," she said. She likes to repeat the straight lines of the brick paths and plant the annual flowers in rows. The petunias along the paths spill over to soften the lines. She also has used a variety of ornamental grasses of different heights to add interest.

As the Rest Area Garden thrived, a group from Saint Cloud traveled to botanical gardens around the Upper Midwest to view gift shops. As a result, they added the gift shop in 1999 thinking it would be a good source of income. The Village Gift Shops now manage the store.

Upon the completion of the gift shop with its deck overlooking the Mississippi River, the former muddy lot had become a grand entrance to Clemens Gardens.

What's Up • Continued from page 1

In Clemens Gardens, each area is designed with a special look that fits into the overall Garden, that balances with what has been popular with Garden visitors in the past (they really like bright colors), and that takes advantage of new plants and new trends.

In 2011 the colors in the Formal Garden were primarily red, orange, and yellow. In 2012 the major colors will be "royal" colors of yellows and purples. Some of the flowers planned for next year include "Ray" petunias in deep purple and sun yellow and angelonia "Big Blue." Coleus "Alligator Tears," alternanthera "Purple Knight" and "Gold Thread," and ornamental peppers will add colorful foliage to the mix. In the Rest Area Garden the dominant colors in 2011 were pinks and pastels. In 2012, purples and burgundy will be added to these colors. Similar changes will be made in the other gardens: updated color choices, improved plant selections, and changes in design.

Nia's Picks and Pans · 2011

- Some of the plants she chose to be low maintenance were a big success. The ageratum "Mediano Lavender" and "Artist Rose" grew well in the Rest Area Garden and needed no deadheading.
- Agave cacti were planted along University Drive and Kilian Boulevard, in the Treillage Gardens, and as spikes in urns. They were a big hit and have already been moved back into the Green house for the winter and will be replanted outside next year.
- Visitors loved rudbeckia "Denver Daisy"—a bright yellow bicolor with a brown center.
- Gaura "Pink Picotee" was very low maintenance and looked great all season.
- New Guinea Impatiens were a success. There are plans to use more of them in pastels and dark reds in both the gardens and containers.
- Some things that did not do so well: In 2011, it was too wet for most of the verbena cultivars. Also, calibrichoa did not perform well in containers in full sun. Next year they will try mini petunias hoping they will perform better than calibrichoas.

In the Rose Garden

The Virginia Clemens Rose Garden 2011 season officially began when the roses were uncovered on April 25. This was unusually late due to cold weather. As you may know, the large hybrid tea rose collection has been protected for the winter for the past few years with a covering of construction blankets. First, the long canes of the roses are cut back, then compost from the City compost facility is applied and the entire area is covered with the blankets. Even though we had a late spring, the roses were already leafing out when they were uncovered. Staff pulls the compost away from the base of the plants and they are ready to grow for the season. The growing season ended on November 8 and 9 when the roses were covered.

The highlight of the Rose Garden is the extensive collection of hybrid tea, floribunda, grandiflora, and mini roses in the main garden. Every year, new roses are purchased to add to the collection, and some roses



Weeds Book Review by Donna Gorrell

In Weeds: In Defense of Nature's Most Unloved Plants, Richard Mabey deftly carries out the ambitious goal of his subtitle. A noted British nature writer, Mabey begins his discourse by stating the obvious: "It all depends what you mean by a weed," and "The definition is the weed's cultural story." So what definitions does he bring up? You've no doubt heard many of them: "A plant in the wrong place" or, from Ralph Waldo Emerson, "A plant whose virtues have not yet been discovered."

Other defining criteria are "toxicity," "ugliness," and "poor posture." Mabey jokingly cites the official definition for the City of Houston, Texas: "any uncultivated vegetable growth taller than nine inches." This, Mabey comments, could apply to "two-thirds of the entire United States' indigenous flora." Of course, "All these definitions view weeds entirely from a human perspective." And it's not that simple: "Weeds thrive [in a] symbiotic relationship" with us. So he proceeds to analyze this "love-hate" relationship.

There are the "superweed villains" that humans have allowed to thrive, such as cogon, a

tough grass that replaced forests laid bare in Vietnam by Agent Orange, and kudzu, "perhaps America's worst demon," introduced in the southern United States from Southeast Asia for "honourable" intentions. Then he describes purple loosetrife, "one of Britain's most beautiful flowers," but in the U.S. it has become "a solid thicket of purple which even muskrats cannot penetrate." Any "cosmopolitan invaders" that accidentally or intentionally got moved to a new ecosystem are "the greatest threat to biological diversity after climate change and habitat loss," he declares.

But Mabey doesn't condemn weeds for their "maverick independence." In chapters titled for storied weeds such as "Self-heal," "Waybread," "Knotgrass," and "Thoroughgrass," he recounts weed history from a sympathetic perspective. In his own garden, he sees weeds as "a reassuring reminder that life goes on." Further, "in a precise sense they are also part of the heritage or legacy of a place, an ancestral presence." He does, however, admit to also thinking of weeds as "invaders," and when they get in his way he "hoicks them up."

Mabey tells numerous stories of how weeds got where they are and what their effects have been in their new environment as well as in their original ones. He also deals with human responsibility for some of the disasters involving transplants. Of course, he's mostly telling the

are donated by the major rose companies. Fortunately, all the roses are labeled so you can write down the names of the ones you really like. New roses in 2011 included several of the Fairy Tale series from Kordes Roses (Germany) that included "Cinderella," "Black Forest," and "Floral Fairy Tale"—small plants with big, fragrant, old-fashioned-looking flowers. Conard-Pyle roses that did well were "Mother of Pearl," "Tequila Supreme," and "Orchid Romance." Several Weeks roses were also nice— "Koko Loko" and "Sugar Moon."

Deb likes two of the AARS winners she is growing in the Gardens. One is a 2012 winner called "Sunshine Daydream." It is a tall yellow grandiflora that is very disease resistant and quite hardy. She reports that it lived up to its reputation as a winner in a trial where no fungicides were used. She also liked a 2010 AARS winner, "Easy Does It." This rose is a soft mango orange/apricot floribunda type with interesting scalloped petals, and it was very disease free. Deb says that not all the AARS roses are as wonderful, hardy, and disease free—at least in our climate!

Deb also grows and evaluates small shrub roses from the "Northern Accents" series and for the Northern EarthKind rose trials. These roses were bred for hardiness, disease resistance, and ability to do well in an average landscape. If you visit the Rose Garden, look for these roses growing in the shrub rose area and the lower rose gardens. There is also a collection of "Easy Elegance" roses developed by Bailey's Nurseries in Saint Paul. Two small shrub roses that did very well were "High Voltage," a yellow rose from the Easy Elegance series, and "Peppermint Pop," which has one of the highly acclaimed "Knockout" roses as a parent. Many of the shrub roses I mentioned are readily available from local nurseries, so if you see one you like, you can buy one for your garden.

Fortunately, most of the roses survive the winter, but there's always room for more. Next year, look for "Twilight Zone," a deep maroon grandiflora, "Sparkle and Shine," a yellow floribunda, or "Bulls Eye," which is ivory with a cranberry eye.

The Gardens are a centerpiece of our community. It is truly wonderful to see what can be accomplished to continue the vision of the people who started the Gardens many years ago with the support of the City, the dedication of the Gardens staff, and the support from members of MCBS.

story of British weeds.

In his chapter "Gallant-Soldier" he looks at invasive species in the United States. English grasses, in particular, "had a profound effect" east of the Mississippi, where native grasses had been "simply munched into oblivion" when settlers moved across the Appalachians with their dairy cattle and goats. There, an introduced common English meadow-grass, Poa pratensis, became Kentucky blue-grass. West of the Mississippi, two-thirds of western grassland vegetation was European by the 20th century. By the end of the century, 258 agricultural weeds in the U.S. were European.

Curiously, though, the "weed" invasion has actually been one-sided, Mabey says. Of the American plants that have invaded and naturalized in Britain, "not a single North American species has become a troublesome weed of farmland."

In the end he's back to the "love-hate" relationship. He tells us, "Weeds are our most successful cultivated crop," and a few lines later, "We get the weeds we deserve." Perhaps his conclusion could be stated in this sentence: "Reaching a rapprochement with weeds—and their inevitability—will always be a dizzying process."

Mabey, Richard. *Weeds: In Defense of Nature's Most Unloved Plants*. New York: HarperCollins, 2010.

Cactus • Continued from page 1



they have a suite of morphological characteristics
which function as adaptations to living in conditions that have some combination of low water
availability and excessive sun

exposure. Most cacti don't really have leaves-their leaves have evolved into spines. This feature has multiple functions: the spines help to protect the plant from herbivores and from physical damage, as everyone knows, but they often also help to provide shade from the harsh desert sun. The density of spines is often greatest at the top of a cactus, where most of the sun exposure happens, and a cactus grown indoors usually produces a noticeably reduced number of spines. Some cacti, for instance Cephalocereus senilis, the "old man of Mexico," even grow a flowing shock of white hair (white reflects light) which looks like a little wig. A few members of the cactus family, the genera Pereskia and Pereskiopsis, are bushlike and have normal plant leaves. These species are thought to resemble the past ancestor of all cacti.

Cacti are also typically barrel or cylindrical in shape. This presumably functions to limit loss of water and exposure to sunlight, due to reduced surface area. Rounder plants can be large but simultaneously have less outer surface than plants with more convoluted shapes. This round shape exposes only one circular surface to the sun above and reduces water loss by limiting the number of stomata, which are small pores that allow exchange of carbon dioxide and oxygen but also lose water to evaporation when they are open. Water loss is also limited by Crassulacean acid metabolism, a special form of photosynthesis used by a number of desert plants that allows gas exchange to occur during the night when the sun is not causing dessication. This is not possible for most plants because they normally have to do gas exchange at the same time light energy is available, which of course is during the day. Photosynthesis in cacti also takes place in their green stems, since they normally don't have leaves. Cactus stems have a waxy coating that helps to prevent water loss.

Cacti, as true succulents, store large amounts of water in their tissues for use during dry weather. By producing dense networks of surface roots, they generally attempt to capture as much water as possible in short periods after rain. Roots can also grow rapidly in response to rainstorms. Since cacti mostly rely on temporary surface soil water, they generally don't have taproots as large as other plants. Taproots mainly occur in tall columnar cacti for anchoring. In Arizona I once dug up and transplanted a saguaro cactus as tall as I am using only a simple shovel, though it needed to be staked carefully in its new location. Because of small root systems, water storage ability, and capacity for rapid root regrowth, cacti can be readily transplanted. Easy transportation (including transit through the mail) is also facilitated by their ability to sit around without roots or soil for fairly long periods of time. Although this is an extreme example, I have known hobbyists who misplaced cactus parts under furniture in a greenhouse for as long as 18 months, at which point they were discovered, planted, and commenced to grow. I have been known to casually let cacti sit around unpotted for months at a time, although this isn't really recommended.

The natural geographic range of cacti stretches from southern Canada through the United States, and through Latin America most of the way (but not quite) down to the southern tip of South America. Cacti are native to almost all of the 50 states, excepting Alaska and northern New England. They are most abundant in deserts, of course, but cacti are also found in grasslands and coastal plains. Prickly pear cacti are native to Minnesota, including *Opuntia fragilis*, which forms large colonies on rocky outcrops, including



Quarry Park in the Saint Cloud area. Cacti also occur on most islands adjacent to North and South America, including the Caribbean and Galapagos islands. Members of the family have been planted all over the world by humans.

Because of their relatively high bio-

mass and for other reasons, cacti are ecologically important in deserts in the Americas. Flowers are usually self-incompatible, which means they need to be pollinated from a different plant. A number of species have long flower tubes that are pollinated only by certain species of moths. Other flowers have specialized shapes for pollination by bats or hummingbirds. Cactus fruits are often important food sources for many animals, including humans. The fruits frequently last a long time.

Humans historically have made use of cacti for various purposes. You are probably reading this because you are familiar with cacti as ornamental potted plants, or landscape plants in warmer climates. Cacti are desirable for their use in xeriscaping and, because they don't die back to the ground, they look good year-round. Prickly pear cacti have edible fruits, and their stems have been widely planted for food, including in Africa and Madagascar. You have probably seen pads in the produce section of the grocery store! Peyote, or Lophophora williamsii, produces a psychedelic drug used traditionally by Native Americans in the Southwest, and other cacti have similar properties. Large columnar cacti, including saguaros, are supported by an internal woody frame which Native Americans traditionally use as a wood source. Various cacti, particularly large prickly pears, are planted as selfmaintaining living fences. Unfortunately some species are sufficiently popular in the plant trade that they have become highly endangered in their native ranges.

I can report from self-experience that cacti function as excellent ornamental landscape plants in desert environments. They grow and reproduce slowly, usually don't grow out of control, and as mentioned above don't usually go through a season when they disappear below ground or drop their leaves and look lifeless. Cacti can, however, become invasive in areas outside of their native ranges. One famous example is prickly pears, which were introduced into arid regions of Australia in the 1800s as ornamentals. They quickly escaped into the desert and grew completely out of control, spreading across thousands of square miles by about 1920. This became problematic for the Australians, since the cacti spread quickly in dry forests and grasslands and are inedible for cattle. Scientists began searching for unknown natural enemies of the prickly pears with

Continued on page 6 • Cactus

Growing Amaryllis for Winter Beauty

by Joan Andersen

Amaryllis, also known by the seldom used botanical name of hippeastrum, is a large showy plant that is native to the Americas. They are available in a tempting array of colors and forms. Solid colors can be soft or bold and include red, white, pink, cranberry, apricot, and lemon-lime. There are single and double forms, and the flowers may be upward or outward facing. Some cultivars may be bicolors or have contrasting edges, veins, or throats. Petal edges may be "piecrust" or ruffled, and the petals may be pointed or rounded, recurving or open. There are compact cultivars for smaller spaces. You can find an amaryllis to match your decor or find one to celebrate the colors of Christmas, Valentine's Day, or Easter.

Most of our cultivars have ancestors that live in tropical and subtropical areas where the weather is wet for most of the year and dry for a few months. The plant grows actively and stores energy during the wet season and goes dormant and loses its leaves during the dry. To have amaryllis perform well in our homes, we need to mimic this weather cycle as well as we can in our northern climate.

When buying amaryllis bulbs, look for very large bulbs, which will produce multiple flower stalks with more blooms. Large bulbs may be available at good garden centers or can be ordered through a bulb catalog or on the internet. Most sellers of high quality bulbs can tell you the height of the plant in bloom and the average number of days to bloom from the time the bulb breaks dormancy.

Whether you purchase potted bulbs or just the bulb, they are ready to grow and bloom. Beware that bulbs that are sold already planted may be in a lightweight plastic pot that will not support a mature flowering amaryllis. Amaryllis can be very top heavy so they need a heavy pot that is large enough so that the bulb will have 1" of room on all sides to allow for the

roots to grow.

You can buy potting mix and add additional perlite to make sure the soil will drain well. It is helpful to moisten the potting soil a little before adding it to the pot. Begin by putting some gravel or pieces of broken pot at the bottom by the drainage hole and then add the soil to the level where the bulb's neck will be above the rim of the pot. Spread the roots of the bulb and place it in the pot, then add soil until the bulb is 1/2 to 2/3 covered. The soil should end at least 1" below the rim of the pot and the bulb should sit high in the pot. Water well and discard the water from the drainage tray. Place the pot in a sunny warm location. Don't water again until the pot is dry or the foliage appears, because overwatering could make the bulb rot.

When the leaves and flower stalks appear, begin to water and fertilize the plant, being careful that the pot is not soggy. Once the flower stalks come up they will lean toward the light,

> so rotate the pot so the stalk will grow straight up. Taller varieties may need staking. Gently insert a stake into the soil, being careful not to injure the bulb, and tie the stalk to the stake. Or, a stake may be inserted in the pot at time of planting.

Once the flowers open, move the plant to a location away from hot sun and drafts from the heat registers or the front door. Keeping the plant out of direct sunlight helps the flowers last longer.

After the plant has finished blooming and you would like to try to get the plant to bloom again, cut off the flowers so that the plant won't use energy to make seeds. Move the plant back to a sunny area, watering moderately, and let the foliage grow. The leaves need to grow so the bulb stores enough energy to produce flowers again. During the summer after the weather has warmed, the pot can be placed outdoors in a shady area. Gradually increase the light and then sink the pot into the garden where the plant will receive sun for most of the day. Continue to water and fertilize with a balanced fertilizer through the summer. Just be sure you bring it indoors before cold weather.

For winter bloom, place the pot in a cool dark place (such as a closet) and dis-

continue watering. Let the foliage dry down naturally and remove it and let the bulb rest for two to three months. Check on the bulb weekly, and when you find new growth bring it to a warm area with bright light and water the pot. You can also time your bloom by moving a dormant bulb into the light and warmer temperature and giving it water. It takes at least 4 to 6 weeks for a dormant bulb to produce flowers, depending on the cultivar.

I encourage you to spend some time looking at a catalog to see all the wonderful amaryllis cultivars in many colors, shapes, and sizes, or head out to your favorite nursery to bring one home. Their dramatic flowers will brighten your home during the cold winter months.

Color • Continued from page 1

Color, form, and texture are three key characteristics of plants that add interest to the winter landscape. A leafless tree or shrub can add interest in both color and texture or texture alone. For example, the salmon to reddish-brown exfoliating bark of river birch (*Betula nigra*) makes it a very attractive winter accent. The winged bark of burning bush (Winged Euonymus) is interesting and occasionally will bear red berries that are a landscape bonus. One of the most beautiful sights in winter is the bright red twigs of red osier dogwood (Cornus sericea) protruding from a blanket of snow. To "Cardinal" and "Isanti," which are noted for the excellent winter stem color, we add "Arctic Fire," an introduction by Proven Winners that is more compact and has even more vibrant stem color. "Silver and Gold," "Bud's Yellow," and "Flaviramea" are yellow-twigged dogwoods that are prized for their bright winter color. If you have room for a larger shrub or a colorful screen, try the reddish-orange stemmed "Flame" willow (Salix) sold by Bergeson Nursery. The dogwoods and willows should be pruned frequently, as the young shoots possess the brightest color. Once the dogwoods are established, about one-third of the oldest stems should be removed at ground level every year.

The persistent red fruit of trees and shrubs is sought out for winter color. The number of crabapple (*Malus* spp) varieties that have persistent fruit continues to grow. "Prairiefire" with its beautiful deep pink flowers and persistent small-sized wine-red fruit is a personal favorite of mine. "Red Splendor" is a variety that has been around for a while and still produces an outstanding crop of bright red fruit nearly every year. The weeping form of "Molten Lava" along with its small persistent fruit adds another dimension to its usefulness. When selecting a cultivar of flowering crabapples to plant, be sure to select one that has good resistance to apple scab, that pesky foliage fungus that causes the trees to lose their leaves in July. "Adams," "Donald Wyman," "Indian Summer," "Harvest Gold," and "Thunderchild" are a few of the many crabapples that have persistent fruit and good disease resistance.

A very hardy shrub that has bright red persistent fruit as well as outstanding fall leaf color is the American cranberry (Viburnum trilobum). If the twelve-foot "Wentworth" is too large for your yard, try the six-foot "Bailey Compact" or the threefoot "Nana." The birds ignore the fruit until spring when it softens and ferments a bit, so the fruit adds bright scarlet color to the landscape all winter. Winterberry (Ilex verticillata) is a deciduous holly that bears clusters of bright red fruit in the fall and winter. Branches of this shrub are often sold by nurseries for Christmas decorating. It comes with a caveat in that, in addition to having somewhat specific cultural requirements, it is a dioecious shrub, which means you must plant shrubs of both sexes to produce fruit. Don't forget the yellow to orange to red hips on the "Rugosa" and "Pavement" shrub roses when considering plants for winter fruit.



One of the easiest ways to add form and texture to our winter landscapes is to simply delay cutting back our perennials until spring. Ornamental grasses with their dramatic silhouettes become even more beautiful when bent by snowfall or a bit of frozen sleet. To name a few, the dried seed heads of coneflowers, tall sedums, rattlesnake master, agastache, astilbe, and globe thistle all have interesting form and texture. Add to these the dried inflorescences of the popular panicled hydrangeas. They add to the snow-covered winterscape, but are particularly attractive when the panicles are dusted with a little snow.

I do not want to minimize the role of conifers in the winter landscape. They are sometimes referred to as the "meat and potatoes" of the landscape because they add color, texture, and mass. There is a wide diversity among the "evergreens" as to color, form, needle length and texture, and ultimate size. They are attractive on their own and provide the perfect backdrop for other plants on the winter palette. When you are selecting conifers for your landscape, it is extremely important that you look at mature size, because some of them mature at a height of seventy feet or more with a width of thirty to forty feet.

I have done some scratching the surface, but there is much more plant material that will add color and interest to your landscape. Now that winter and its snow have arrived, take a winter walk through Clemens and Munsinger Gardens or one of the arboretums or even along the city streets and look for some of the trees and shrubs and herbaceous plants that you would like to add to your winter landscape. Go to the library or your favorite bookstore and check out Trees and Shrubs for Northern Gardens by Snyder and Isaacson or the new edition of Growing Shrubs and Small Trees in Cold Climates by Lonnee, Rose, Selinger, and Whitman. They are both excellent books that provide the characteristics and cultural requirements of trees and shrubs that are hardy in our area.

When selecting trees and shrubs for your landscape, go beyond plants that have attractive flowers in the spring and colorful fall foliage. Look for those that possess colorful fruit or bark and have interesting form in the winter. Think of your landscape in terms of four seasons.

Cactus • Continued from page 4

hopes of identifying a biological control agent in its native range. A small species of moth was identified from Argentina, Brazil, Paraguay, and Uruguay. Since the moth was previously unknown to scientists, it had no name. It was given one of my favorite scientific names: Cactoblastis cactorum. What better name for a moth which destroys cacti? Regardless of moniker, the moth spread rapidly across Australia and, within a few years, had reduced the cactus population by several orders of magnitude. The moth doesn't jump from prickly pears to other plants, so today in Australia there are small numbers of cacti which stay out of the way of the moths. If the prickly pears start expanding and get out of control, there are always a few moths around to eat them. This sounds like a textbook example of successful use of natural enemies to combat invasive species, except that the moth has since made its way to North America (where it is not native) and is causing some problems on native prickly pears.

Overall, cacti are a visually attractive group of plants, with interesting adaptations and many uses. In the future I will discuss some of the species and groups which we can grow indoors and outdoors in our area.

MCBS Events • 2011 • MCBS Events

MCBS Photography Contest Photography in the Gardens by Mary Margaret Bjorklun

Visitors to the Gardens can often be seen snapping pictures of beautiful floral displays and decorative features in the Gardens. This year, the MCBS Board initiated the idea of a photo contest to give visitors yet another reason to visit the Gardens. Any visitor was eligible to enter the contest. We designated two photo categories, Hardscapes (decorative features in the Gardens) and Landscapes (garden scenery), plus two age categories, adult and youth-18. Close-up photos were not allowed because an identifiable, specific location in the Gardens was necessary.

The contest attracted 30 participants who submitted a total of 60 photos. Prizes of \$100 were awarded to first-place adult winners in each category and \$50 to first-place youth-18 in each category.

Hardscapes, Adult:

1st place • Dianne Benjamin 2nd place • Sabrina Bechtold 3rd place • Sue Weitz

Landscapes, Adult:

1st place • *Sharon Costello* 2nd place • *Eric Wheeler* 3rd place • *Lindsey Beard*

Hardscapes, Youth-18:

1st place • *Melanie Schneidermann* 2nd place • *Mariah Thompson* 3rd place • *Joelle Edwards*



Landscapes, Youth-18: 1st place • Clayton Hendrickson 2nd place • Melanie Schneidermann 3rd place • Clayton Hendrickson

Framed certificates were awarded to 2nd and 3rd place winners in both age groups and subject categories. A reception to honor the participants and announce the winners

was held at the Gardens Greenhouse,

giving everyone the opportunity to view all 60 photos and meet the participants. This fall the winning photos were on display at the Saint Cloud Public Library and Paramount Theatre. In December the photos can be viewed at Whitney Senior Center, followed by January and February showings at CentraCare Plaza. In March the photos will be moved to Lake George Municipal Complex, and finally, in April, visitors to the Saint Cloud Hospital will be able to enjoy the photos. All other entries are available for hanging in city offices and other public buildings.

The MCBS Board and Photo Committee express our thanks to everyone who participated. Next year's contest will be from January through October 25, 2012, allowing photographs of the Gardens to be taken during all four seasons. Contest winners will be able to keep digital copies of their photos, and entries that are not displayed can be picked up by the photographers. Entries must be ready to hang. More specific guidelines will be offered on the MCBS web site.

Happy Holidays

Joan Andersen Master Gardener	0
Mary Margaret Bjorklun MCBS Photography Contest Chair	R
William M. Cook Associate Professor Department of Biological Sciences, SCSU	W
Donna Gorrell Professor Emerita Department of English, SCSU	K I T
Carl Hoffman Retired Extension Horticulturist for Stearns and Benton Counties	E R
Carole Pike Master Gardener	S



Reciprocal Admissions Program (RAP)

The AHS RAP Directory is now available online in full color.

AMERICAN HORTICULTURAL SOCIETY

For a listing of RAP benefits go to: http://www.ahs.org/events/reciprocal/index.html



Fun Facts on Root-Beer Floats at "Music in the Gardens"

by Joan Andersen

Root-beer floats have been part of the tradition at our summer "Music in the Gardens" concert setries since the very beginning of the event. To keep the floats afloat, Munsinger Clemens Botanical Society relies on a lot of dedicated volunteer labor

and generous donations from local businesses. As a result, we have been able to keep the price the same—\$1.00—since the day we started! In 2011 we sold 300 to 400 root-beer floats at each of the six concerts. All of the money raised goes directly to purchase needed equipment for the Gardens.

Our sponsors included ice cream from **Kemp's**, root beer from **Bernick's**, napkins from **Thrivent Financial for Lutherans**, straws and spoons from **Dairy Queen** on 25th and Division, cups from **Strategic Equipment**, and a generous gift card from **Coborns** to use for any other supplies needed.

For the root-beer floats sold in 2011 we used:

- 90 1-gallon pails of ice cream
- 240 2-liter bottles of root beer
- 2,400 cups, spoons, straws, and napkins

Our volunteers are responsible for getting donations from local businesses, transporting and storing supplies, and staffing the root-beer float team at the concerts. Thank you to the committee chair Elaine Carter and other committee members Mary Margaret Bjorklun and Jill Florek for their work in organizing everything. A special thanks goes to Beulah Rose Hutchens for assembling the straw/spoon/napkin packets for us in numerous years.

Volunteers who served root-beer floats at the concerts included: Mary Margaret & Gene Bjorklun, JoAnn & Gerry Bjorlo, Pauline & Gabriel Bratt, Sam Calvert, Donna Gorrell, Carol Hallen, Lorene Hark, Bev & Norm Koepp, Sally Koester & Richard Harjes, Sara Magee, Kathy Matthies, LaDonna & Ray Merritt, Mona Muller, Kathy & Orlando Norstad, Marv Pearson, Joyce Pohl, Nicki Rajala & Bill Vossler, Judy & Bruce Regan, Mary & Dan Rethmeier, Karen Jorgenson Royce & Phil Royce, Patsy Schelske, Rajahna Schneekloth, Charlotte Stevens & Lowell Olsen, Marcia Summers, Janelle Van Pinnon, Carol Vick, Mari Walker, Joan West, Lucia & Pete Wilson, Joann & Frank Zezoney.

By the way, if you are interested in serving rootbeer floats at one or more concerts next year let us know. You can sign up by yourself, or get a group of friends together and work as a team. **Contact Elaine Carter** at 320-253-6143 or efcarter@stcloudstate.edu if you'd like to volunteer.

MCBS Board of Directors

Co-Chairs Ioan Andersen Jill Florek Mary Margaret Bjorklun Sam Calvert Elaine Carter Karen Frohrip Donna Gorrell Carl Hoffman Sara Magee Ellen Nelson Lorna Nestel **Bonnie Nies Royce** Nies Mary Ann Phelps Scott Zlotnik

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