

Dakota Gardener

May 2010

A newsletter for gardeners in North Dakota

Vol. 3, No. 5

Ten steps to a fantastic vegetable garden

It's garden planting time! We are done with blizzards for the spring (we hope!) and the soil is warming up.

Gardening is important for us in North Dakota. About one-third of our households grow a garden. Besides the reward of healthy and delicious food, we are also rewarded with savings on our food budget. A recent study showed the average gardener in the USA spends \$70 on their garden and reaps a harvest worth \$600! That harvest can add up to some real savings, plus I suspect the average garden in North Dakota is much larger than the average American garden.

Here are some tips to make your garden successful:

#1. Location, location, location. Your garden should be in a location that receives at least 8 hours of direct sunlight every day.

Plants need sun to produce energy. Do you remember learning about photosynthesis in school? Hey, don't tell me you weren't paying attention! Yeah, I know Susie was cute, but you should have been paying attention to your science teacher instead of flirting with her.

Trust me, vegetable plants need sun. Especially veggies that bloom (tomatoes, peppers, peas, beans,



corn, zucchini). These veggies demand full sun to do well.

If you have a shady spot in your garden, place your leafy or root veggies (lettuce, spinach, radishes, onions, and beets) there.

Besides access to sunlight, locate your garden where it has access to water. This may come in handy if we suffer from drought in the summer.

#2 Delightful dirt. The soil is the foundation to your garden. Respect it. Enrich it.

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FEATURE STORIES

The colors of happiness

How are you feeling today?

Are you looking for a little more excitement in your life? Or maybe life is already too hectic and you would prefer a little more serenity.

You don't need to see a psychiatrist to find happiness. Just go to a garden center. There you can find colors of flowers that are perfect for you and your lifestyle.

Bright colors such as red and yellow provide a feeling of warmth. These colors grab our attention. Use them when you have a distant garden you want to get noticed. Or use these colors near the entrance into a home and they will naturally guide visitors to the door. Striped flowers are especially exciting.

Colors such as blue, lavender, and pink are cooler and calmer. Use these colors in the backyard garden or in patio containers to create a relaxing, serene mood.

Give the Garden Dimension. Think of your garden as a painting.

Select one or two main colors and then spread these colors around in the garden using broad brush strokes. Use small dabs of other colors around the garden to give the flower beds a sense of dimension.

Have a Focal Point. A single-colored mass of flowers can be used to focus attention. Surround it with flowers that contrast in color or height. Garden statuary or a pool of water may also be used as focal points.

Consider the Background. For example, the visual impact of red geraniums or red salvia will get "lost" when planted against a red brick home. Similarly, white geraniums will not stand out against a white fence or white siding.

Dark colors such as deep red, violet or burgundy will contrast nicely

against a light background. Similarly, light colors such as lilac or pink do better against darker surfaces.

Thoughts on Shade. Use light-colored (white, pink or pale blue) flowers to brighten shady areas. Dark colors tend to disappear in shade.

If dark colors are used, surround them with lighter colors. For example, a mass of burgundy impatiens can be used in a shady area, but it won't stand out unless surrounded by pale green coleus or coral impatiens. *DG*



Baptisia is a winner!

Baptisia is the 2010 Perennial Plant of the Year, as awarded by the Perennial Plant Association. Also called blue false indigo, this exceptional plant produces violet-blue, lupine-like flowers in spring.

The shrubby plant grows three to four feet tall with a similar width. It is an excellent plant for the back of the garden and is often used with other

spring-flowering perennials and bulbs to maximize its impact in the landscape.

After blooming, the flowers turn into puffy gray seed pods and are often used in floral arrangements. This North American native is deeply rooted, very long-lived, and drought tolerant once established. It is hardy to zone 3/4. *DG*

Fantastic vegetable gardens (continued from Page 1)

Veggies need at least four inches of topsoil to do well.

Besides topsoil, add an inch or two of organic matter to your garden every fall/early spring. Compost and rotted manure are “black gold” to gardens. Organic matter will open the soil, allowing for better water infiltration. Yet organic matter also has “glues” that hold onto water and nutrients and make them more available to plants.

The only drawback of compost/rotted manure is there usually aren't many nutrients in it—usually less than 5% each of nitrogen, phosphorus and potassium. This is where synthetic (chemical) fertilizers come in handy.

Chemical fertilizers are rich in nutrients. Better yet, these nutrients are available immediately to plants. If your plants are starving, they'll benefit more from a dose of Miracle-Gro than compost (whose nutrients can take weeks to become available to plants).

#3. Super seeds. Look for varieties that are productive and mature early. Our growing season is short and unpredictable—I always get worried when it takes more than 100 days for a variety to mature.

Look for varieties that resist diseases naturally—no one enjoys spraying fungicides on our food crops. We need to stop using so many old varieties and instead take advantage of modern hybrids which resist diseases. A perfect example is our favorite cucumber, ‘Straight Eight’. This variety from 1935 is very susceptible to powdery mildew and other diseases. Instead, we can be using hybrids that are much more productive and reliable.

I like varieties that taste especially good. ‘Sweet Sue’ corn tastes nice, but plant breeders have devel-

oped varieties decades ago that taste twice as sweet and are just as easy to grow. ‘Delectable’ and ‘Ambrosia’ are superior “sugary enhanced” bicolor types for gardeners.

I like to grow veggies that I can't buy at the store. Why would I only grow green beans in the garden when I can also grow some purple beans! These beans are beautiful and magically turn green when you cook them. Kids love watching the pods turn color. We need to use such tricks to get children to like eating veggies!

Or did you ever try yardlong beans? The pods grow 24 inches long and taste like asparagus! You can tell your kids they only have to eat one bean pod for dinner! This is another fun variety for the young—and the young at heart.

#4. Control weeds. The key to controlling weeds is to get them when they are young—before they develop strong roots. A hoe or tiller works well. As for herbicides, Preen (trifluralin) works well at killing most weeds as they emerge. The new organic formulation of Preen is corn gluten meal. It does a fair job of killing some weeds as they emerge and

it is totally safe (after all, it is corn!).

#5. Mulch. Mulch is important for us in the Dakotas. Mulch helps to conserve moisture and nutrients in the soil. Natural mulches such as hay and straw will keep the soil temperature moderate, sometimes giving cool-season veggies like lettuce an extra week of harvesting in summer before the crop gets bitter. Mulch can also protect tomatoes from rotting on the soil and help to shield tomato vines from the blights that splash from the soil onto the lower leaves of our tomato vines.

#6. Prevent diseases. Start by using disease-resistant varieties.

Stay alert for the first sign of disease. Once identified, you can protect your crop with a fungicide (chlorothalonil is most commonly used; while copper sulfate a.k.a. Bordeaux mix works well for organic growers). Remove badly infected tissues from the garden.

Give your plants lot of space in the garden. Allow for lots of air movement. Trellising or staking tomatoes

Continued on back page

Minimizing pesticide use in lawns

Nobody likes using pesticides. They're poisonous! So how we can grow a good lawn, yet also minimize the risk of exposing our families and pets to these poisons?

First, rethink your idea of what is a healthy lawn. Tolerate a few weeds. Weeds are nothing to be embarrassed about. It's completely natural to have a few “wildflowers” like dandelions and clover mixed in with the grass.

Second, if you want to kill weeds, do it in the fall. That's when weeds are most vulnerable. Once a year is usually more than enough.

Lastly, use your common sense when using pesticides. Follow the instructions on the label. Spray at the recommended rate. Wear protective clothing. Spray under calm conditions to avoid drift. Stay off the lawn for 24 hours after applying a herbicide. Store pesticides safely and out of the reach of children.

GARDENING TIPS FOR MAY



Trees and shrubs

- ☞ Viburnums are special shrubs. They provide the landscape with year-round color, starting with pure white flowers in spring, colorful fruits in summer, and vibrant foliage in autumn. The fruits of some viburnum, such as those of the American cranberrybush viburnum (shown) remain on the shrub through the winter.
- ☞ When mulching around a young tree, place a ring of about three inches deep, and reach out at least 12 inches away from the trunk. Gradually *reduce* the depth of the mulching as it approaches the trunk (don't create "volcano mulch piles", as shown below). There should only one inch of mulch near the trunk itself.



Lawns

- ☞ When buying a lawn fertilizer, look carefully to see how much *slow-release* nitrogen is in it. Cheaper, fast-release lawn and garden fertilizers (such as 10-10-10 or urea) give us a sense of pride when we see the grass quickly green up and start aggressively growing in spring. But this aggressive growth only means that you have to mow more often. A quick spurt of grass growth provides minimal long-term benefit to the lawn. Slow-release fertilizers will gradually feed the lawn and support good healthy growth.
- ☞ Lawn fertilizers that do not contain herbicides do not pose a significant threat to our children or pets. These fertilizers simply contain nitrogen, phosphorus and potassium, all nutrients that are naturally found in our soil. The nitrogen granules might burn a pet if it is very, very sensitive. To minimize risk, simply water the lawn to wash the granules off the grass blades and into the soil before walking on the lawn.
- ☞ Mid to late May is a good time to fertilize the lawn, if you have not done so already.



No green in horticulture

People with horticulture degrees may develop a green thumb, but this doesn't help them make greenbacks.

Horticulture is one of the worst-paying college degrees, according to a national survey conducted by PayScale.com.

The average starting salary for a person with a college degree in horticulture is \$37,200 with a mid-career annual salary of \$53,400. This is only slightly better than the worst paying degrees, which include music, theology, Spanish, elementary education, and worst of all—social work.

Source: Yahoo!



Vegetables

- ☞ Plant your sweet corn early to minimize problems with earworms.
- ☞ Some plants like it hot. You will have a better crop of cucumbers, pepper, eggplant, okra and lima beans if you wait until June to plant them.
- ☞ The proper way to transplant a tomato is to “trench-plant” it. Dig a shallow trench about two inches deep. Pick off the leaves from all but the top eight inches of the plant. Lay the plant in the trench and curl the top eight inches of the plant so that it’s above the surface. Bury the rest with soil. The stem buried underground will generate roots and your plants will get off to a quicker start. Trench-planting works especially well for spindly plants. But don’t make the trench too deep, since the soil is still cold beneath the surface.



Fruits

- ☞ Don’t spray apples with insecticides when they are blooming; otherwise, you’ll kill honeybees. This includes home orchard sprays that contain both fungicides and insecticides. Be cautious in using Sevin during the first month after petal fall since it will cause apples to abort.
- ☞ Remove flowers from a new planting of *Junebearing* strawberries during their first year; otherwise, the plants will focus their energy on forming fruits, rather than forming roots and becoming a strong plant. Remove flowers from new plantings of *everbearing* types for six to eight weeks.



Flowers

- ☞ Pansies are among the most frost-tolerant annuals. Other frost-tolerant annuals include dianthus, petunia, and snapdragon.
- ☞ After tulip and daffodil blooms begin to fade, clip off the flower stalks. Don’t disturb the leaves—they are needed to replenish the bulb for next year’s blooms. The leaves will naturally turn yellow once the bulb has refilled itself for next spring. An application of a balanced fertilizer, like 10–10–10 or something similar, at a rate of 2 pounds per 100 square feet, will support bulb development.



Pruning lilacs

It’s important to prune your lilacs regularly to keep them healthy and full of blooms. For now, enjoy the beauty and fragrance of the flowers. Later, remove these blooms when they fade. If you don’t remove the faded blooms, the lilac bush will focus its energy on producing seeds. This will reduce its production of flower buds for next spring’s bloom.

After removing the faded flowers, remove up to one-fourth of the oldest canes every year. A good rule of thumb is to remove one big cane each year. Make the cuts near ground level. This will stimulate new canes to develop from the ground, giving you a fuller bush. The new canes that emerge will grow vigorously and produce plenty of blooms in future years.



and cukes will maximize air flow and minimize disease problems.

In fall, remove disease-infected plants to prevent problems the following year.

#7. Water properly. When I was young, I thought overhead irrigation was good. My reasoning was simple: I felt good after taking a shower, so I thought my plants would feel the same. After working all day in the office, I would come home and give my garden plants a shower. They would all glisten as the sun sets in the west. I didn't realize it, but I was being evil to my plants. I couldn't hear my plants cursing at me, but they were all angry. I was making them more susceptible to disease.

You see, diseases have parties at night in the garden. This is when they infect plants. So keep the leaves of your plants dry, especially at night. Water only in the morning—better yet, never water overhead and instead use a soaker hose or wand attachment to your hose.

Why do we spray plants on their *leaves* when they drink through their *roots*? This makes as much sense as pouring water on our toes when we are thirsty.

#8. Prevent pests. Minimize insect pests by eliminating their favorite homes (weeds and crop residue).

A physical barrier can shield your crop from damage. Examples would include a floating row cover (cheesecloth-like material) placed on top of a crop to protect it from beetles or a cylinder placed over a tomato plant to protect it from cutworms.

Scout for pests. Take action as soon as you see them. But don't spray with chemicals on a routine basis. If you spray all of the time, you will kill more beneficial insects (ladybugs) than pests.

Many insecticides are available. *Bacillus thuringiensis* is a wonderful tool. It is safe and is especially effective against soft-bodied insects including cabbageworms. Its only drawback is it doesn't work immediately—the pest has to eat the insecticide from which it develops a stomach poison. It takes a couple of days to kill the pest.

Neem is a safe and promising organic insecticide used around the world to control pests. Insecticidal soap is safe, but its value is limited since you have to actually spray the bug itself with the soap to kill it. Any pest that arrives in the garden five minutes later is not affected.

Keep in mind that “organic” isn't always safer. The organic insecticides nicotine and rotenone, for example, are much more toxic to humans than the most commonly used “chemical” insecticide, namely Sevin (carbaryl).

Speaking of Sevin, these chemicals are best used when you need an immediate killing. I call this my Clint Eastwood “Dirty Harry” approach to gardening. After I see my crop riddled with holes, I want revenge! I want to see the bugs die—but not right away—I want to spray the bugs, then watch them suffer and drop off the plant, then go through convulsions, and then finally die. Revenge can be sweet in the garden!

#9. Harvest regularly. If you stop harvesting zucchini for example, the plant will stop producing more fruits (an interesting strategy when excessive zucchini is a problem). Instead of producing more fruits, the mother zucchini plant will focus all of her energy on producing seeds within the existing fruits.

You see, plants don't care about you—they care about producing seeds for the next generation. Plants

only care about one thing—sex—and producing seeds.

By the way, there is no such thing as excessive zucchini. Once a zucchini gets 18 inches or longer, you can carve it into a canoe, put a sail on it and have a boat race down the river. Try it in the bathtub if you don't live near a river. It's great fun!

Or be a commander of your own zucchini fleet while attacking the fleet of your friends. Does all of this sound stupid? Hey, I had a simple childhood. Maybe you know of other creative uses for zucchini.

#10. Extend the harvest. Our growing season is short and we can benefit greatly by extending it. When frost threatens in fall, I'm often asked “what is the best way to protect my tender plants?” The answer is simple: just pretend you were going to spend the entire night naked in the garden. What would you want wrapped over you? I would like a nice blanket—so would your plants. And in the north, we know the value of layering our blankets. So add a layer, if available.

Another strategy is to take advantage of our cool spring and autumns. There are lots of greens that tolerate light frosts. Light frosts actually make these veggies taste better. Last year our team of gardeners fell in love with the Asian greens tatsoi (similar to spinach) and hon tsai tai (similar to broccoli).

The best radishes you ever eaten are those you grow in the fall. That's because the radish roots will mature when temps are cool. The opposite occurs when we sow radish in spring, as the roots mature when temps are getting warmer, causing the roots to become hot and bitter.

Good luck with your garden this year. Mother Nature, please be kind to us! 