

# From The Ground Up

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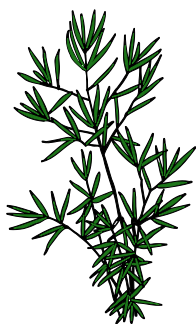
## Asparagus: A Spring Delight

**By: Margaret Murphy, Master Gardener**

Asparagus is a hardy perennial that comes up before any other garden vegetable. It requires little care and can produce crops for 15 years or more given the right conditions. To ensure a long, productive life, asparagus needs to be placed in the right spot. Choose a fertile, sunny site with good drainage. It grows in almost any type of soil but does not tolerate poorly drained soils.

Asparagus can be grown by seed though most home gardeners find it more convenient to start with one year old crowns. Early spring is the best time to plant. Crowns are generally planted in shallow furrows. How deep to set the crowns will depend on the soil type. Planting depth is six to eight inches for light, sandy soils whereas with heavier soils it is about four inches. Space the crowns 12 to 18 inches apart in the row. If more than one row is planted, be sure to leave enough room between them. Four to five feet is suggested. Spread the roots out on the bottom of the furrow with the buds

pointing upward. After planting, fill the furrow with soil. Traditionally, gardeners cover the crowns with a few inches of soil and then gradually fill the remainder of the trench as the plants grow. However, this is not necessary especially if planting hybrid cultivars.



Asparagus is dioecious meaning it produces a separate male and female plant. Many gardeners grow only the male asparagus as male plants live longer and are generally more productive. To grow asparagus patience is required. It needs to be well established before you can begin to harvest the spears. None should be collected in the first growing season.

During the second growing season, spears are harvested for only a two to three week period. In the third and following years, harvesting can continue for six to eight weeks. To harvest cut spears at the soil surface when they are six to eight inches long. You can also snap the spears off at their base. Stop the harvest around mid-June. Harvesting beyond this point will reduce the crop for next year.

After gathering the last crop of the season, let the asparagus tops grow to take on a fern-like appearance. This top growth provides food that the plant needs in order

to generate next year's crop. The tops can be trimmed back in late fall once they have turned brown.

If you are not sure growing asparagus is for you, consider its many virtues.

Asparagus is a good source of vitamins A, C and K as well as several B vitamins. It provides potassium and other minerals plus has been touted for its antioxidant properties. Asparagus has zero fat, no cholesterol and is low in sodium. It can be steamed, sautéed, grilled and added to numerous dishes.



[www.extension.umn.edu](http://www.extension.umn.edu)

## Flowers for Spring Planting

**By: Margaret Murphy, Master Gardener**

With the mild weather, people have been bitten by the planting bug. Though the temperature is balmy for this time of year, spring weather is still unpredictable. So here are a few flowers that can tolerate a dip in the thermometer or even manage through an early spring frost.

Flowers you can direct seed right now in the garden include sweet pea. An old-fashion favorite, it offers a pleasing, sweet fragrance. Grown as a climbing vine or trailing groundcover, it prefers moist, well-drained soils. Larkspur is another. Growing to about two feet in height, this spike-shaped plant comes in a variety of colors and will surely brighten any garden bed.

For an annual with interesting foliage, consider planting the Bells-of-Ireland. Its stems are thickly covered with bell-shaped structures called calyxes. Within the calyxes bloom petite, white flowers resembling the clappers of a bell. The flowers bloom throughout the summer. Excellent for dried or cut arrangements, the Bells-of-Ireland can be sowed directly into the soil starting in late March/early April. They favor moist soils and full sun though will manage fine in part shade.

For spring transplanting, there is the pansy. Pansies always seem to be described as flowers that will make you smile. I guess it's because they come in so many festive colors and have a "face-like" flower that appears to be smiling back at you. They will readily survive a late-season snowstorm. The flower is edible and the petals are often used to color butter or to decorate cakes and pies. Then there is the snapdragon. It is considered an easy annual to grow and blooms throughout the growing season. A great flower to plant for children as they love opening the "jaw of the dragon" and letting it snap shut.



Photo: Clemson Cooperative Extension



Photo: aggie-horticulture.tamu.edu

## From The Ground Up

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South Dakota  
Cooperative Extension Service



# APRIL 2012



## Calendar

By Kathy Osterloh, Master Gardener

- Check trees for rabbit damage.
- Remove winter debris from lawn & garden area.
- Start seedlings 6-8 weeks before last frost

for warm-season vegetables.

- Get a soil test to check nutrient levels of garden beds.
- Plant perennial edibles, such as strawberries, rhubarb, raspberries, and asparagus.
- Seed directly in the ground easy, fast-growing annuals that like cool weather, including bachelor's buttons, larkspur, California poppy and cool-season vegetables, such as lettuces, spinach, greens, peas, carrots, radishes, and more.
- Plant seedlings of cool-season flowers and vegetables, such as pansies, snapdragons, broccoli, cauliflower, and cabbage.
- Plant bareroot and container-grown trees, shrubs, and roses.
- Divide perennial flowers that bloom in late spring, summer, or fall.
- Remove all weak, diseased, or damaged canes of summer and fall-bearing raspberries at ground level.
- Remove mulch from strawberries in April as new growth begins.
- Repot houseplants, if needed, into a larger container.
- Begin fertilizing houseplants lightly.
- Apply pre-emergent herbicide in April to prevent crabgrass. If you'd rather not use chemicals, check out corn gluten meal, as an organic alternative to other pre-emergent herbicides.
- Patch bare spots in the lawn. Fill low spots with excellent quality topsoil and seed. Overseed if desired, though fall is the best time. (Just be sure you apply the pre-emergent well after the grass seed is up so you don't kill your grass seed!)
- If you have compost, rake it over your lawn to feed it and to fill low spots. It's fabulous—improving soil texture & fertility.

## Herb Garden

By Priscilla Jurkovich, Master Gardener

This section highlights herbs that can be grown in the South Dakota region.

**Echinacea** *Echinacea angustifolia* is from the Compositae or Asteraceae family. The leaves are sparse, narrow, pointed and hairy. There are few flowers on each stalk. The center of the flower or "disc" is raised and prickly. The outer petals form around the inner disc such as the daisy or sunflowers in this family. This zone 3 perennial herb has long roots that are known for its medical qualities. It was considered a sacred herb of the Native American Indian. It blooms July through August. It can be propagated by seeds, basal cuttings, root cuttings or division.

Echinacea stimulates the immune system. It has anti-bacterial, anti-fungal and antiseptic qualities and has been called the "natural antibiotic". Echinacea elevates the white blood cell level in the body and can help inhibit the ability of viruses to enter the body. Typically, it has been used at the onset of colds, sore throats, respiratory infections, cystitis and other acute infections. It helps relieve allergic reactions by working with the histamine response in the body and anti-inflammatory actions. It can be taken internally for strep throat, fever, teeth and gum disease. It may be used externally in tincture form for poison ivy, insect bites, abscesses and boils. Echinacea removes the toxins from the body through the lymph system. Echinacea is non-toxic but for optimum support, use only for 10 days since it begins to lose its effect.



Photo: Priscilla Jurkovich

## Weed of the Month: Black Seed Plantain By Paulette Keller, Master Gardener

**Growth:** Found throughout the Great Plains in damp, rich soils in roadsides, lawns, gardens, creek banks and waste areas. The black seed plantain forms a rosette. The leaves are round in the middle and pointed at the tip and are 1 ½ to 9 ½ inches long and 1 to 6 inches wide. The margins of the leaves are wavy and notched and tinged in purple. The flower spike is a 1/2 inch or less wide and is tapered at the tip. The flowers are densely packed on the flower spike. The entire plant is 1-16 inches tall.

**Duration:** The black seed plantain is a perennial that blooms from May to November.

**Control:** You can pull or hoe plants before they set seed. Frequent mowing will keep it down but most likely will not eliminate it. A broad-leaf herbicide may be used once plants are actively growing in spring or fall. The best non-chemical control of plantain is a healthy, vigorously-growing lawn.

**Uses and Values:** Small mammals and songbirds consume the seeds and the leaves are a favorite food of rabbits.



[http://www.ppws.vt.edu/scott/weed\\_id/plaru.htm](http://www.ppws.vt.edu/scott/weed_id/plaru.htm)



# Raised Bed Gardening

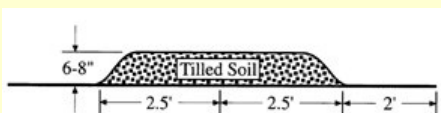
By Deb Wallin, Master Gardener

Gardening in a raised bed, a common practice before colonial times, is growing in popularity across the country. Raised gardening is a simple technique that can improve your health and the productivity of your garden. Raised beds can provide better soil structure, better drainage and longer growing seasons.

"Raised" means the soil level is higher than the surrounding soil. "Bed" means it should be small enough to work in without stepping onto. Therefore a bed should be no wider than 4 feet but length can be whatever suits your needs. Wider beds can be subdivided into sections using planks or stepping stones. The garden does not have to be enclosed or framed.

The simplest form of raised beds are flat topped mounds, usually 6 to 8 inches high, which require no materials other than additional soil to form the beds. As the season progresses, the soil will settle, but the mound will remain. Once created, raised mounds only need minor reshaping each season.

Supporting or framing your raised bed with wood, stone brick or plastic adds a neat finished look. It

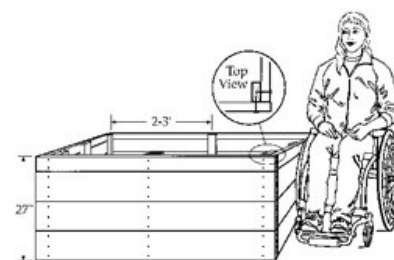


also places an important barrier between your garden and your lawn, which is the biggest source of perennial weeds. When choosing your framing material, use untreated rot resistant lumber like cedar. Railroad ties and other lumber product may create a nice looking frame, but may be treated with chemicals which will be toxic to the plants and you. Cement block will raise the soil pH over time.

Containerized raised beds with 10" to 12" walls offer more protection to

high traffic areas. Raising a bed 2 or 3 feet can lower heat, maximize physical accessibility and reduce maintenance. For wheelchair users, 27"

is a comfortable working height, but you can build the bed to any height. Choose the width to match your arms reach. Adding benches along the side can provide even more convenience.



## Benefits of Raised Garden Beds:

- save your back / ease of working & access
- higher yields / grow longer
- water conservation / warmer soil temps
- reduce weeds/stop invasive grass
- keep clean / stop pests
- never till again / reduce soil erosion
- overcome bad soil / improved drainage
- make your garden more attractive

## Common Troubles of Conifers

By Jo Scott Cannon,  
Master Gardener

When growing conditions are ideal, disease is less common. It is sometimes unclear whether factors such as improper planting, adverse weather, high water table, drought or other stresses directly cause symptoms or make trees more susceptible to disease. Some common evergreen problems are listed below:

**SPHAEROPSIS**, or Pine tip blight, formerly *Diplodia tip/shoot blight*, is a common fungal disease of stressed conifers, especially pines with needles in bunches of 2's and 3's. Needles and branches die irregularly within tree, accompanied with resin soaked infected tissue; black fruiting bodies develop on the base of the dead needles and pine cones.

**DOTHISTROMA NEEDLE BLIGHT** is a devastating foliar disease that can infect all two or three needle pines, but only Ponderosa and Austrian pines are highly susceptible. The

ends of infected needles gradually die and turn brown. Tiny black fruiting bodies develop near the infection band in late fall or the following spring. Infected needles drop prematurely. Blights occur mostly on the lower portion or on the north side of trees where needles remain wet longer.

**RHIZOSPHAERA NEEDLE CAST** can infect several spruce species, but primarily Colorado blue spruce. Needles are infected in late spring. Infected needles usually turn yellow and then purplish-brown in late winter. The following spring tiny fuzzy black fruiting bodies (pycnidia) appear. Infected needles drop off by mid to late summer of the year following infection. *Rhizosphaera* can be controlled by two properly timed applications of fungicide in each of two consecutive years.

**STIGMINA NEEDLE CAST** is a fungal disease similar to *Rhizosphaera* needle cast. Needles turn purplish-brown and fall off, working from the inside of the tree out and from the bottom of the tree up. Small black fungal fruiting bodies develop in rows on infected needles, *Stigmina pycnidia* has a "feathery" surface and *Rhizosphaera* fruit is smoother. Confirmed in 2007, research into *Stigmina*'s role as pathogen is ongoing. It

would make sense that fungicide treatments that work for preventing *Rhizosphaera* needle cast (one application of a contact fungicide such as chlorothalonil or Bordeaux mixture in mid-May, and another four to six weeks later) would also help to manage *Stigmina*. Fungicide applications at other times of the year are not likely to help.

**PINE WILT DISEASE** is caused by the pinewood nematode which is moved from infested to non-infested pine trees by the pine sawyer beetle. The disease typically kills Scotch (Scots) pines within a few months (it can also occur in Austrian, Jack and Mugo pines). Sanitation will slow the spread of pine wilt disease. Pines dying from the disease should be cut down then burned, buried or chipped before pine sawyer beetles can emerge. Some pines can be protected with trunk injections.



## Upcoming Events

**Master Gardener Plant Sale at Fairgrounds- May 12, 2012**

**Garden Tour -July 11, 2012 or rain date is July 12, 2012.**

**MG State Update- Brookings, SD- September 14, 15 and 16, 2012**

### Gardening with the Masters

A seminar series on gardening at the Outdoor Campus, Sioux Falls

- April 16- Soil, weeds and control, rain barrels, compost, soil enhancements.
- May 7- Vegetables, flowers-annuals and perennials- layout of gardens, season extension.

For more details about these events call 605-782-3290

or email

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## Being Green

*By: Margaret Murphy, Master Gardener*

As we move forward into a new planting season, there are several steps gardeners can take to make their gardens more sustainable. A sustainable garden is one that thrives with minimal inputs of water, fertilizer and pesticides. This not only reduces environmental impacts but can also save us time, labor and money.

A good first step is to keep our soils healthy. If the soil is healthy, your plants will get off to a good start and be more resilient to environmental stress or disease. Research links the majority of plant problems to poor soil. Soil benefits from the addition of organic matter. It improves the water and nutrient-holding capability of the soil. Plus, healthy soils often need less fertilizer.

Water usage is another area where we can incorporate good conservation habits. Choose plants with low-water requirements (once established). Avoid watering too frequently - wait until plants need watering then water deeply. Use mulch to help hold moisture and reduce evaporation. Water early morning instead of mid-day when much of the water is lost to evaporation. You can also save money by using rainwater captured in a rain barrel or cistern.

Lastly, when it comes to pest management, follow the old adage from Ben Franklin 'An ounce of prevention is worth a pound of cure.' Pest prevention involves doing what you can to keep plants healthy and vigorous. Healthy plants have less risk of developing pest problems. You can also select insect and disease resistant plant varieties. Use barriers such as fences or row covers to exclude pests from access to your plants. In addition, plant a diverse garden. That way if a pest problem does arise, hopefully, the whole garden bed won't be in jeopardy. If a problem does develop, get a correct diagnosis before treating. It may be that treatment is not necessary or can be done without chemical inputs. If pesticides are needed, always read and follow the product label. Avoid overuse and treat just the target area.



## Local Foods Corner

*By: Chris Zdorovtsov, Community Development Field Specialist, SDSU Extension*

The concept of 'local' has many definitions in research, and it is nearly impossible to state that local is within "X" number of miles from the source. Some would define local as being produced within state boundaries, while others would look at a certain distance where state lines are irrelevant. A large city may represent a local region in one state, while a more unpopulated state may accept a larger geographical region.

Often the region, whatever the distance, is determined by a combination of what the consumer will accept as local and distance a farmer can afford to travel and still be profitable. Finding the local producers who are willing to sell within your region can be a challenge. There are several resources listed below that may assist you in your search for local food.

**Dakota Flavor** (<http://www.dakotaflavor.com/>) is an electronic directory provided by the South Dakota Department of Agriculture which lists agricultural products, producers, processors and support services. This site includes options for finding pick-your-own operations and farmers markets to specialty food companies or livestock producers.



### South Dakota Local Foods Directory

(<http://www.sdlocalfood.org/>) is an online and printed guide provided by Dakota Rural Action. This source allows you to search by region for a range of South Dakota food products, including vegetables, eggs, meats and grains.

### Local Harvest

(<http://www.localharvest.org/>) is a nation-wide directory that allows you to find products from farmers markets, CSA's, groceries, co-ops, local certified organic producers and more. One feature this site has is a national map that pin-points farms across the country.

**MarketMaker** (<http://national.marketmaker.uiuc.edu/>) is an interactive database of food industry and marketing data developed by University of Illinois Extension. It has an extensive collection of searchable food industries including farmers markets, local growers or product producers, groceries and restaurants supplying local food, farm to school participants and more. The information appears both on a map and in a query. South Dakota is not currently a member, but if seeking foods from across the border, both Iowa and Nebraska participate.

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