garden

Spring Is Springing

... And For Gardeners, That Means It's Time To Get Your Seeds, Supplies Ready To Go

BY DENISE ELLSWORTH © 2012, Akron Beacon Journal

Gather your seeds and supplies: It's nearly prime time to start seeds for this year's garden. Most seeds are best planted somewhere around six to eight weeks before the last spring frost, which is usually somewhere around Mother's Day in mid-May

Nothing is more disappointing than beginning the garden season by starting seeds with high hopes and dreams of a wonderful gar-den, only to have just a few seedlings emerge and even fewer plants survive into May. Follow these steps to grow healthy seedlings indoors:

• Use only soilless mix. not potting soil, garden soil or previously used potting mix.

Seeds and young seedlings are easily killed by a plant disease known as damping-off, which is caused by soil-borne pathogens. These pathogens occur in

mineral soils, such as the black soil in that bag of potting soil or soil from the garden.

Damping-off kills seeds before they emerge from the ground, but it can also cause small seedlings to rot and die. These seedlings often collapse at the ground level as if they need water, but in fact the damping-off pathogens have rotted the roots and stems.

Avoid damping-off by using only sterile, soil-less mix, such as seed-starting mix.

Hardware stores and garden centers are bursting with a vari-ety of high-quality seed-starting mixes this time of year. Reconsider trying to save a few dollars by skimping on the soil mix; this is a sure route to seedling death.

 Don't start seedlings too early

Some seeds need to be started very early in the season, such as geraniums, which should be started 10-12 weeks before the last frost. Seeds of heliotrope, one of my all-time favorite purple flowers with a magical vanilla scent, need to be started an amazing four months before the last frost, a possible reason this plant is sometimes expensive or

and shelves, with the bleach/water solution. • All containers need drain

holes. As cute as it may look to plant seeds in a coffee cup or cereal bowl, it's almost guaranteed failure by water-logging plant roots. Roots need air spaces as much as they need water, so be sure all containers have drain holes. Add holes to yogurt containers or other recycled containers.

 Avoid overwatering seedlings, and never let containers share drained water.

The pathogens that cause damping-off are water-loving organisms. They are favored by overwatered soil and stressed plants, so avoid overwatering. The pathogens are motile in water, meaning they can move from one pot to an adjacent pot if the two containers share drained water. Make sure all containers drain freely, and make sure containers don't share drained water. Consider propping containers on a wire mesh to make sure water can drain free and isn't shared between pots.

• Keep seedlings under fluorescent lights.

Although it might seem bright on the kitchen windowsill, this location rarely provides enough light to encourage healthy, even plant growth. Seedlings perform best when grown under fluorescent lights, such as shop lights. These fixtures can be suspended from a shelving unit to be about three inches above emerging seedlings. As plants grow, raise the lights to maintain the intensity. Special grow bulbs aren't necessary to start seeds; basic shop lights will suffice.

• Keep seedlings warm with good air circulation.

Tired of reading about damping-off yet? Trust me, it's devastating to lose whole flats of young seedlings to disease. Prevent problems from the start by keeping plants as healthy as possible. Many gardeners use heat mats under seedling trays to give plants an extra boost. Cool, wet soils favor disease. Heat mats go a long way to helping seedlings escape disease. Once seedlings have their first set of true leaves (after the seed leaves have formed), they are more diseaseresistant. A fan can also help circulate air to ward off disease.



Dr. Matthew James, site design presenter will show trends and steps for homeowners to begin plans for their yards. Dr. James stands in the Villa d'este Garden in Tivoli. Italy, on an SDSU-sponsored trip for his design students.

Residential Landscaping Tips To Be Featured At Presentation

BY BRENDA K. JOHNSON

P&D Correspondent

Dr. Matthew James will present "Site Design for Residential Landscapes" for the public at 7 p.m. Tuesday, March 27, at the Pavilion Audito-rium on the Sacred Heart Hospital Campus in Yankton.

James is assistant professor of Landscape Architecture at South Dakota State University, and has taught landscape design students there the past 10 years.

His presentation encourages the homeowner to think about how to organize the yard.

"When you drive around any neighborhood, many houses have 'ring around the founda-tion,'" James says. "By that, I mean a planting bed with a single row of plants that circles the house. There's value to hiding the foundation, but site design planning can take the yard to the next level. It can even lead to an outdoor room that you can utilize like an interior room in your house.

James will illustrate with visual examples. "For this presentation, I'll talk about functional and aesthetic problems that residents face on their sites. I'll show the steps that help a homeowner start a master plan for organizing a ground plane hardscape (such as pavers or concrete), planting beds, and turf grass.

The Details

WHAT: "Site Design for Residential Landscapes."

WHO: Dr. Matthew James, Assist. Prof. Landscape Architecture, SDSU

WHEN: 7 p.m. Tuesday, March 27 WHERE: Pavilion Auditorium, Yankton

Avera Sacred Heart Campus ALSO: Free event, donation appreci-

ated. Door prizes and yard/garden networking

plants for the design, James will concentrate on how plants and other elements fit into the design plan.

We designers like pictures. I will show pictures from the region and share why I like the yard design, what elements are included, and why the yard is effective. I hope to inspire attendees to see what they might want to integrate

into their landscape at home." At SDSU James teaches classes relating to ample, he works one-on-one with students who developed site design plans for Brookings Habitat for Humanity homes.

Students interacted with homeowners, took site measurements, developed a base map and a master design plan to present to clients," James says

As well as teaching, James has submitted design site plans around campus: a new plaza at the South Dakota Art Museum, plaza for Hobo Day sculptures, and residential plan for the yard at Woodbine Cottage where the SDSU President and his wife live.

As part of his service to the institution, James serves on a committee to improve campus green efforts and contributes his interest in environmental sustainability.

Missouri Valley Master Gardeners are hosts for the presentation.

"Participants surveyed last fall, suggested this topic," says Betts Pulkrabek who is a master gardener event organizer. All are invited to the event. "Anyone who has a 'green thumb dream' or yard to make better, or one who has a 'clean slate' yard is welcome.'

'Start somewhere and start small," Pulkrabek says, "and do projects in increments. If you have a pile of rocks in your yard and say, 'What will I do from here?', we think Dr. James will inspire you to put a plan on paper. There will be time to network after the presentation.

hard to find.

Most seeds, however, perform best when planted six to eight weeks before the last frost.

And some seeds, like cosmos or marigolds, perform just as well when planted directly in the garden in mid-May, after danger of frost has passed.

Seeds planted too early tend to get weak, and don't outperform younger, sturdier plants started with ideal timing.

Not sure when to start those tomato or lupine seeds? Check the back of the seed packet for all the details. Buying supplies this week and planting next weekend will make it eight weeks to Mother's Day, so there's plenty of time to get started.

• Don't reuse containers until they're clean.

Containers previously used to grow plants are most likely contaminated with the pathogens that cause damping-off. Planting in dirty containers is a perfect way to introduce pathogens to clean soil.

To keep these pathogens at bay, wash all containers with soap and hot water, then rinse them in a solution of one part bleach to 10 parts water.

• Clean all other items used in seed starting.

This includes small watering cans, planting tools or reused labels. While you're at it, wash the seed-starting area, including trays

• Harden seedlings before planting them outdoors. The warm, sheltered life

seedlings lead inside does little to prepare them for the harsh realities of garden life. To help seedlings make this transition, harden them gradually over seven to 10 days. Cut back on water and fertilizer, and expose plants to increasing amounts of sunlight, rain and wind each day. Tender plants need time to adjust to real-world conditions; the hardening off helps them toughen up and get ready for the move to the garden.

• Don't plant warm season plants in the garden too early.

Until soils have drained and warmed, plants will do little but "sit there" in the garden if planted too early. This is especially true for plants that thrive in warm temperatures, like tomatoes, peppers and petunias. Better to keep these plants in their containers a bit longer, where they will benefit from warmer soil temperatures and better drainage.

For information about starting seeds, including lots of timing information for individual plants, see "The New Seed-Starter's Handbook" by Nancy Bubel.

Yankton Church To Offer Community Garden

Riverview Reformed Church of Yankton is offering a community garden this year and is seeking people to participate.

This will be a raised-bed garden.

Those interested are encouraged to sign up by April 1. For more information, call Teresa at 665-9204.

Workshop On Greenhouse Crops Set For S.F.

A workshop on "Nutrition for Greenhouse Crops" will be held at the SDSU Regional Center 200 E. 8th Street Sioux Falls, on Thursday, April 5, running from 1-4 p.m.

The workshop will be presented by Geoffrey Njue, SDSU Extension Specialty Crops Field Specialist.

High quality plants are critical to the profitability of greenhouse grower. Producing a quality crop in the greenhouse is dependent on the overall nutrition of the plants.

If you grow plants in the greenhouse and would like to learn how to manage plant nutrition to produce quality plants, plan to attend this workshop. Topics include: Substrate (growing media) monitoring, identifying nutrition disorders, and correcting nutritional disorders.

For more information or to register, contact Njue at (605) 782-3290 or geoffrey.njue@sdstate.edu .

For this talk, rather than naming the right

site design. In Residential Design Studio, for ex-

Rain Barrels 'An Easy Way To Go Green'

BY MELISSA KOSSLER DUTTON For The Associated Press

Robin Blair does what she can to help her plants thrive. She plants them in good soil and keeps the weeds away. She also waters them regularly with rainwater captured in barrels in the yard of her Shrewsbury, N.J., home.

Collecting the water is easy, she says, and good for her plants and the environment.

"Rainwater is void of chemicals. It's kinder to plants and landscaping," says Blair, who has two rain barrels and a cistern tied into her gutter system. "Water is a precious resource. Why not collect rainwater and reuse it?

Blair is such a proponent that she got trained to teach other gardeners how to make and use rain barrels. When she organized a workshop last spring, she was surprised at how many people wanted to attend. "We kept getting more and more orders," she says.

Rain-barrel use and classes are on the rise around the country, according to gardening and conservation experts. Although the concept of capturing and reusing rainwater has existed for thousands of years, many gardeners and environmentalists are revisiting it because of concerns about storm-water runoff and water conservation.

"It's one of our more popular classes," says Madeline Samec, a horticultural program assistant with the St. Johns County Extension Agency in St. Augustine, Fla. "We almost don't have to advertise.'

Most rain barrels hold around 55 gallons of water and are connected

to a downspout. They normally have an overflow pipe that detours excess water away from a home's foundation, and a filter that prevents mosquitoes from entering. Rain barrels also have a tap that can be used to fill watering cans or connect to a hose.

A 55-gallon barrel connected to a 1,000-square-foot roof will fill up during a 1-inch rain. The barrels can be purchased for \$50 to \$120 each, or constructed out of food-grade drums.

In addition to watering the garden, some people use rainwater for koi ponds or aquariums, says Dotty Woodson, extension program specialist for water resources at Texas AgriLife Extension Service in Dallas.

She said many rain-barrel users like that rainwater does not contain chlorine, fluoride or other chemicals that municipalities use to treat water.

While investing in a rain barrel does help the environment, it's not likely to shave a lot off of a homeowner's water bill, Woodson says.

"People might come to the class with the idea that it's going to save them money but we're very, very honest about that," she says. "It won't have a huge impact. The environmental issue is what we're looking at."

A rain barrel can be connected to a gutter system without too much difficulty, the experts said. First, homeowners need to remove a section of downspout and replace it with flexible tubing. When the rain barrel is in use, the tubing should run from the downspout to the barrel. When the rain barrel is not in use, the tubing should reconnect back to the downspout.

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Rain barrels are "a very easy way to go green," says Mandy Stark, marketing and outreach specialist for the city of Lenexa, Kan., which promotes their use through a public art display. Every summer, the city places painted rain barrels around town to encourage residents to install them.

Those who do "feel they're making a tangible difference - that they're actually doing something that protects the environment," Stark says.

Many municipalities experience a 30 percent to 40 percent increase in residential water usage in the summer. Rain barrels can help reduce that.

Diverting and collecting rainwater also lessens water pollution in streams, rivers and lakes. When rainwater travels over impervious surfaces - such as parking lots, roads and driveways - it collects pollutants, which often end up in local bodies of water.

Rain barrels don't require much maintenance, says Jen Willoughby, an environmental educator with the Interstate Commission on the Potomac River Basin, in Rockville, Md.

Just make sure to keep the screen clean throughout the season, she says. And in cold climates, disconnect the barrels and store them upside down during the winter.

Paul Hlavinka, president of the Muddy Branch Alliance, an environmental group in Gaithersburg. Md., agrees that rain barrels are a relatively easy way to make a difference.

"I love to go out and look at it," he said. "You don't realize how much water is coming off your roof until you go out and look."

