



Sorensen expanded the new methods for vegetables into her flowerbeds and containers around the yard. “I can hardly wait for this flowerbed to start blooming,” she said.

Plant Exchange:

Garden As You Like It

Share tips from your plant experience, give us a tour of your plant site, or send your questions related to outdoor or indoor plants to news@yankton.net Attn: Brenda Johnson or write to P&D, 319 Walnut St, Yankton, SD 57078, Attn: Brenda Johnson.

BY **BRENDA K. JOHNSON**
P&D Correspondent

Not everyone wants to garden conventionally or has a suitable site. Here's an option.

Q: How do you garden so it works for you?

A: “You see the white sand right here? That’s our soil,” Loretta Sorensen says. She and her husband Alan live on an acreage east of Yankton. We stand in her yard in mid June. “(Our soil is) like beach sand. I tried container gardening for potatoes and tomatoes. They dried out when it was hot. I got a handful of potatoes and no tomatoes.”

Loretta says that her father is a successful traditional gardener. “He does the tilling, everything in nice even rows. I tried that out there by the barn a couple of years. We have an artesian well nearby. As soon as it got dry and hot, those plants withered. Weeds were a constant problem. Bugs were terrible! Yield was never very much and it was a lot of work to keep it up. In spite of that, I never gave up on the idea of fresh vegetables. I have this space. Somehow there has to be a way!”

Loretta is the owner and publisher for Prairie Hearth Publishing, LLC on West 23rd Street in Yankton. She’s also a freelance writer and has written many articles for the *Yankton Press & Dakotan* and regional and national farm magazines.

“I write stories about farmers who use ‘no-dig’ and ‘no-till’ methods for their crops,” she says. When researching the Internet for her stories, she also reads about sheet mulching for the home garden or “lasagna gardening.”

“You put layers of materials on top of the ground and plant in it,” Loretta says. “A YouTube video showed how to do this no-dig method at home. The more I learned, the more I thought that this is my answer.”

She and Alan stack cardboard, newspaper, mulch, potting soil, mulch, potting soil, and mulch in a 4 ft. x 8 ft. bed, wetting each layer before adding the next. She uses old barn hay or bagged soybean residue as mulch. “The bed is about 1.5 ft. high to start and now (mid June) it’s 1 ft. high.”

Decrease in height of the “lasagna garden” stack is not due to gravity or settling of the layers. It’s due to the composting process. Soil microbes feed on materials and give off nutrients that take up less volume while they change materials into forms that plants can easily use.

“Stacking the materials (for the plants to grow in) this way is a completely foreign idea to my husband and to most people. I don’t know anyone personally who is doing this. It was quite a bit of work.” Plants grow atop a composting pile of cardboard, newspaper and soil.

“My husband had the concern that plant roots might not have enough material in which to grow,” she says. But this is her learning experience, a new way to grow vegetables.



Sorensen planted seeds in potting soil in a Styrofoam cup with a hole in the bottom for drainage. She watered the seeds and added mulch to the cup for moisture retention. The cup was then pushed down into the mulch/soil layers as shown. Cups also helped her see the exact location of the seeds for care.

STACKING BEGINS

They layer three “lasagna garden” beds. Loretta begins planting with potatoes. “I planted two days after Easter. Friends planted their potatoes (with traditional methods) two weeks later. Theirs came up and ours didn’t. I thought that the beginning of this experiment failed. But then all of a sudden, these potatoes popped up. I suppose this material takes longer to warm in spring than (ground) soil.”

She incorporates more Internet information on intensive gardening and companion planting into her plan. “Deep feeders such as potatoes and sunflowers and corn get a foot of space around them in the garden.”

She plants them first. “Onions can go around them because they don’t require much room. Beans have a symbiotic relationship with corn. With carrots, kale and chard I can put the seed in a spice shaker and sprinkle them around.” She says that when plants cover the surface of the bed, it holds moisture like a cover crop. She reads that insects may become confused with the mixture of plants in a bed (instead of a monoculture) and cause less damage.

She lists the plants she likes to eat and wants to grow. “I drew sketches of the seed and transplant beds so I can see what goes here and there when planting. I used spacing recommendations on the seed packages. I could tell how many hills of beans or other plants I’d have. Then I knew how many seeds or transplants I needed to buy. Diagrams took about two hours.”

“For everything I planted as seed except for the shaker seed, I used a Styrofoam cup. I filled the cup with potting soil and punched a hole in the bottom for drainage. I put the seed in the cup and added a little mulch. It was easy to keep moist, and the cup was easy to see down in the in the layered materials. Only one didn’t germinate. As the plant grew, if needed, I could cut the cup away from the plant and re-plant it.”

As for all new methods, Sorensen may modify the plan next time. “It could be there’s too many plants in a small space. From my research for writing, if the right plants are together, you’ll do fine.”

PLAN HITS HITCH

Loretta and Allen install fencing to frame the beds and keep the materials stacked

properly, and place plastic pavers she finds at Menards, all around the perimeter of the beds for tidy maintenance. But now Sorensen faces an insect dilemma.

“I don’t want to use chemicals on my vegetables,” she says. “The idea is to have naturally grown vegetables. But (with grasshoppers showing up), I could see that I could lose the whole thing.”

“My dad said Sevin dust will take care of any bugs, so that’s what I tried. I sprinkled a 3-foot barrier of the dust around the beds. On the plants in the beds I used diatomaceous earth.” Now in mid June plant leaves are whole and dark green and tomatoes are as large as tennis balls.

GARDENING EXPANDS

Motivated by these early steps of vegetable growing success, Loretta expands her efforts. “I’ve not been able to grow plants around the yard because of the poor soil quality.” Now she plants cannas, castor beans, moonflowers, and coleuses in flowerbeds and containers. New methods she tries related to “lasagna gardening” include adding potting soil to native soil, covering beds with soybean residue mulch for holding moisture, companion planting, planting in Styrofoam cups, and vigilance in maintaining soil moisture.

“If we were home all the time, finding mulch materials around the yard might work, but we’re not, and a bag of mulch helps.” She found the soybean residue in convenient, easy to lift bags at Fensel’s Greenhouse in Freeman. “I love, love, love my garden but I have lots of other things that I’m doing.”

Setup of the materials required extra time, but she is surprised how little other garden tasks require. “There have been very few weeds. Between March and mid June, I have spent about twenty minutes weeding so far. That is cool. If I do have to weed, I’m not down on the ground (because of the raised beds).

Watering takes time, but she notes that mulch really holds moisture. Now she can think about lawn and garden décor. “I love landscaping,” she says.

“This is a way to express creativity. I like learning new things and doing new things, especially when it is productive. I can hardly wait for this flowerbed to start blooming.”

Sorensen Lasagna Garden Notes

- Measure with an empty 2 cu. ft. potting soil bag.
- For a 4 ft. x 8 ft. bed, use about 8 cu. ft. of potting soil.
- Use about 12 cu. ft. of old hay or soybean residue per bed.
- As each layer is applied, soak with water.
- First lay cardboard, then newspaper, mulch, potting soil, mulch, potting soil, and end with mulch on the garden bed.
- Use seed package for distance between plants. Plant ones with widest distance first.
- If companion planting, see the Internet for plants that work well together. Avoid putting plants of the same family by each other such as tomatoes and peppers.
- Mixture of kinds of plants in bed may attract fewer pests than monoculture.

“I could take this whole lawn and turn it into garden. I don’t have that much time for garden, but I could see a flagstone path and benches. Then I could walk around the yard and my feet won’t get muddy.”

“I told my husband that if I prove to be a horrible vegetable gardener, there will still be pretty flowerbeds from this idea,” Sorensen says. We all want a little success in what we love.

DID LASAGNA GARDEN METHOD WORK?

“I’ll do it again,” Sorensen said after the season. “Good way for me to garden in sandy soil, but I’ll make some changes. No Styrofoam cups to plant seed in. Though the bottom of the cup was removed, plant roots stayed confined to the cup. Instead I’ll create a nest in mulch with a little potting soil for each seed, with maybe a twig for marker. I had great germination last summer.”

“I need to discuss how many kinds of plants in one bed with my husband,” she said. “In one bed I had beans, cantaloupe, squash, corn, and pumpkins. Maybe fewer kinds of vegetables in the same bed. But, in another bed I may try the many companion plants again because the Styrofoam cups held them back. Some farmers use cover crops or densely planted plants that companion well together. I have a lot to learn about what works for me to get best results.”

“Lasagna garden” beds worked well in other ways. “Beds held moisture well,” she said. By July we used soakers and watered every other day and every day when intensely hot. Water penetrated into bed well. This garden was easy outside of having to water. I might have spent two hours weeding the entire summer. Zucchini did quite well; I had trouble finding them in the jungle of plants.”

“I am happy with my effort. I learned a lot,” Sorensen said. “Setting up the garden was intimidating—Am I wasting my time? Am I doing this correctly? But it was worth it and won’t be hard to replicate. It’s the best gardening experience I’ve ever had, though it wasn’t perfect. It was a tough season for trials, but this is a cheap and easy way to garden.”

- Master Gardener Training 2013 will be offered by South Dakota State University Extension staff with Yankton as a regional site for three hands-on learning days in May. This year, online learning will be combined with the three sessions at the Yankton County Extension Office on Whiting Drive. Topics include care and selection of trees and shrubs, lawn care, vegetable and flower gardening and more. Application and fee deadline is March 27. Details on website: <http://www.sdstate.edu/sdces/resources/lawn/master-gardeners/>
Contact: Mary Roduner, Master Gardener SD Coordinator at (605) 394-1722

February Plant Tips

Korey Mensch of Mensch Greenhouse, INC of Avon is a commercial grower of annuals, perennials, shrubs, and vegetables serving South Dakota, North Dakota, NW Iowa, and SW Minnesota. Mensch Retail Greenhouse and Flower Shop is located on Hwy 50 at Pine St. in Avon. (605) 286-3638

Thanks to Korey Mensch for tips on plant selection and care for our dry conditions. “Drought conditions that started last winter and still persist make the upcoming planting season somewhat of a challenge to predict for me as a grower,” Mensch said. “Relentless heat and constant winds fried up many annuals and perennials last summer even though they were getting regular care. Trees, shrubbery, and lawns had their fair share of suffering too. Don’t be too discouraged.”

- You will have to assess your own gardens and yards as they start to flush with life. Lawns in our area may have taken the most abuse we will hopefully ever see. My own lawn crackled under my feet from not being watered. I did, however, keep my pots looking fine with daily watering and weekly feedings (last season).

- The more heat and sun, the more fertilizer you will need for a gorgeous display. That goes for everything in your garden.

- Annuals: My superstars for hot & dry conditions are Angelonia, Gazania, Petunia, Portulaca, Vinca, and Zinnia. All of these are great for that constantly colorful display to last the season. These are my first choices for all-around tenacity.

- Perennials: Many modern cultivars of native species have lost some of their drought resistance for the sake of the flower or habit in the selection process. However, natives should still be some of your first considerations when choosing plants for perennial gardening. Echinacea, Gaillardia, Penstemon, Rudbeckia, Salvia, and any kind of Sedum would be ready to fight our most rugged of heat waves.
- Watering deeper and less often is a great weapon when you are in a battle with the combination of sun, heat, and wind, this will encourage the root systems to get larger and go deeper.

Gardener To Gardener

Share what you find useful for gardening.

Muriel Sorbel of Yankton is a retired nurse. She has gardened about thirty years, but grew up gardening with her mom and grandma. She is an active member of Missouri Valley Master Gardeners. “Al-ways willing to help,” Sorbel said. “I am like most gardeners this time of year, looking through seed catalogs and planning where and what I will plant.”

- Due to the dry weather issues last year, I do plan on prepping my garden better for dry weather. I always have used soaker hoses wound around my garden rows to water if needed. This year I plan on using the hoses, but will make sure they are buried right next to my seedlings. I also will cover the hoses with some sort paper and grass clippings for mulch to hold in moisture and prevent weeds.

- For watering, I have a 650-gallon farm water tank that receives and holds rainwater from my roof. If we get an inch of rain, it fills the tank. A tank waters my garden three times. It drains by gravity to water.

- For gardening convenience, I have a mailbox mounted next to my garden gate. It holds gloves and garden tools. Seems I always walk out to the garden and don’t bring what I need. So left in the mailbox, they are handy and always dry.

- To avoid using a lot of insecticides and protect my Brussel sprouts and broccoli from cabbage moths laying their eggs on my plants, I use a screen. My husband helped me build a frame out of (straight and elbow) PVC pipe from the hardware store. The lightweight screen covers all sides, ends, and top of the framework and is placed over the plants. It remains over the plants all season. It works great. The frame and screen can be taken apart and used again. The screen slightly shades the plants, which helps prevent sunburn.



Plant Exchange: Blog With Us!

- Plant Exchange: Blog with us!
This blog is an interactive site for people of our USDA Zone 4-5a region to exchange ideas about plants. Want to read some past Plant Exchange features you missed? Want to share a comment about plants?
- Can spinach be grown locally in-ground most of the year? Some vegetable and fruit growers learn about high tunnels for extending seasons.
 - With the skills of local artisans and businesses, how does a Yankton homeowner create custom hardscape for his yard?
 - Want to read a bit about Thomas Jefferson the gardener?
 - How does a Yankton couple solve backyard hillside landscape issues with persistence, skills, and belay for safety?
 - What differences has the drought made so far in Yankton parks and green spaces? What annuals withstood heat and drought the best?
 - Want to see and read about what’s growing and blooming around the United States and elsewhere? “Garden Bloggers Bloom Day” link will show you selections from January 15, 2013.
- Check us out at the web address: brendakjohnsonplantexchange.wordpress.com

Dibbles & Bits

- Presenters Mary Klimczyk and Betts Pulkrabek of the Missouri Valley Master Gardeners will discuss “Reading Labels for Healthy Eating,” at the Healthy Yankton Winter Festival, Saturday, Feb. 16, at 10-11 a.m. at Yankton Activities Center on Summit Ave. The presentation will be held in the Yankton High School Commons. Monosodium Glutamate (MSG) as a food additive will be discussed. Master gardeners will have a booth in Summit Activities Center Saturday, Feb. 15, from 9 a.m.-1 p.m.