Simple Smart Gardening Topics for 2014

2014 Smart Gardening efforts focus on healthy soils, drought-tolerant plants and much more.

Smart Plants

Water-smart landscapes by design

 Drought-tolerant plants save water, money and time

Smart Soils

- Smart gardens begin with healthy •
- What to do about compacted soil •

Smart Lawns

- Low maintenance lawns in Michigan
- Shady lawn alternatives

The old timer vegetable gardener speaks

Sage advice will help you look back and learn from experience before making drastic changes in your gardening plans.

Gretchen Voyle, Michigan State University Extension

The only thing more long-winded than an old gardener is an old gardener that is also a MSU Extension horticulture educator. The free advice is never-ending and worth every penny. Remember the sage advice you find here comes from someone who has made the mistakes already – you don't have to!

Keep a garden journal of some kind, even a photo journal. Each year, make a little sketch of where the various vegetables were planted and what kinds they were. You might even save the seed envelopes. Keep a listing of any that were extremely tasty or poor performers. This will help when buying seeds for the coming season. Give a brief accounting of the weather like "cold and rainy summer" or "big, fat drought." This helps you understand how various crops performed.

Get a soil test every three years. Not only are you interested in the nutrients, but you want to make sure that your soil pH is enabling, not hindering, the garden. A soil pH of

6.5 is good for almost all vegetables. Buy a soil test online at www.msusoiltest.com.

Decide before any planting is done if you are having an organic garden. Research what pesticides you might use for insect or fungal problems. Know where you can purchase them locally if there is a problem. A great resource is Dr. Jeff Gillman's book, "The Truth about Organic Gardening." He proves through research what is fact and what is fiction.

Don't make drastic changes to the entire garden. If you read about planting on raised mounds or in trenches, experiment with just a portion of the garden. If square-foot gardening or lasagna gardening sounds interesting, experiment with a small area. Form your opinions on several years of trial, not just one season.



Use mulch to conserve water. It is important to only mulch with materials that will break down in one season. It could be straw or chopped leaves, shredded paper or finely shredded bark. Clean is key here. Don't add weed seeds by accident. Coarse wood chips will last longer than the gardener who put them in.

Liberty Hyde Bailey was one of MSU Extension's founders. In the late 1800s, he wrote, "A garden is half made when it is well planned. The best gardener is one who does the most gardening by the winter fire." Take another even older gardener's advice.

Water-smart landscapes by design

Reduce the need for watering your landscape by using simple but smart tips.

Rebecca Finneran, Michigan State University Extension

Planning a water smart garden begins with understanding your site. Michigan's landscape was carved out by glaciers leaving behind many different types of growing environments. Soils range from dense clay to gravelly sand that cling and shift to the undulating native terrain. Home gardens that begin with a soil test can be designed around the existing pH, soil type and texture. Visit www.msusoiltest.com to order your soil test today.

Understanding the water-holding capacity of your soil and the water needs of each plant type is the next step in creating your water-smart design. Incorporate organic matter such as compost or leaf mold into droughty soils and employ the qualities of water-holding mulches around beds or plants that are sited in

these soils. When using organic mulches, take care to break up the top "crust" once a season. Mulches may become overly dry, making it difficult to re-wet, hence working against the garden instead of for it.

Thirst not: Choose the right plants

Plants with low moisture requirements are a gardener's first defense against tough, dry sites. Many native, woody trees and shrubs are highly adaptable to the urban landscape as well. For example, understory shrubs such as bottle-brush buckeye or our native *Diervilla* can compete with surrounding plants and take a dry summer. Couple these types of shrubs with upland tree species such as the bur oak that can easily tolerate "feast or famine" conditions.



Replacing lawn with expanses of plants including tough natives at the water's edge not only cuts down on watering and mowing, but also prevents run-off and sediment from entering the waterway.



Grouping plants such as Japanese Forest Grass and Coral Bells beneath shallow rooted trees creates an environment where both can grow successfully.



Low-growing sedum like this 'Angelina' paired with a thrifty ornamental grass, Pennisetum 'Burgundy Bunny,' is adaptable as well as and beautiful.

Perennials that have silvery foliage such as catmint (Nepeta sp.), Russian sage (Perovskia) and Yarrow (Achillea) 'Moonshine' are wise choices for areas that are droughty. Another group of succulent plants known as stonecrop (Sedum) provide a wide variety of colors, textures, heights and even low, ground-hugging habits. Splashes of color from bulbs can make a

landscape plan exciting and add seasonal interest. Ornamental onion (*Allium*), many types of lilies and even tulips are great choices for a dry, sunny site.

Deeply rooted plants with native parentage such as false indigo (*Baptisia*), cup plant (*Silphium*) and goldenrod (*Solidago*) are also a great addition to a drought water-wise garden.

Get smart – be intentional!

During the design phase, plan to group plants with "like needs" together. If you are planning on using plants that require supplemental irrigation, fertilizer and nutrients, intentionally plant these together and to prevent your own frustration, plant them relatively close to a water source.

Shade-loving hostas, big-leaved *Ligularia*, sedges and lungwort tend to be "thirsty" perennials. Even in dense shade, most of them will wilt or yellow out

during the long days of summer. Several plants like Japanese painted fern use dormancy as a defense mechanism, but quickly re-sprout when late-summer rains occur. Instead of eliminating these plants from your choices, plan to group them where you can concentrate your irrigation efforts.

If you have droughty, full sun areas in the landscape, match plants to that space. Using graph paper, define existing conditions by drawing giant "bubbles" onto the plan. The bubbles will then mark the edge of a shady spot, excessively dry area, etc., where you can begin to group your plants according to their needs.

Consider alternatives to traditional turf grasses. Do we really need that palatial lawn? We care about our lawns, but evaluate how much lawn is really necessary to the overall design. Turfgrass requires a fairly high level of care including supplemental water and fertilizer. Large areas of lawn can be replaced with low-growing, rugged native grasses such as prairie dropseed (*Sporobolus*) or different types of sedge (*Carex*.) Mowing once a season would be fine for these plants that do not require any additional inputs.

When it rains

When you need to irrigate, plan to evaluate the efficiency and output of your sprinklers. Automatic watering systems can supply an excessive amount of water as well as cause the need for supplemental fertilization for some plants. Common sprinkler devices also may not apply an even spray of water, so be sure to check out the pattern to see where it is heavy or light.

Lastly, buy a rain gauge! If you know how much rain fell while you were sleeping, you will be much better at determining the needs of your garden plants.

Shady lawn alternatives

Make your yard's shady area the most beautiful place.

Gretchen Voyle, Michigan State University Extension

Two words that don't go together in a gardener's vocabulary are "shade" and "lawn." Grasses used in lawns fancy themselves as prairie plants – the more sun they can get, the happier they are. There is no such thing as a shade-loving lawn grass. There are



This shady side yard was completely turned into a shade garden using shade-loving ground covers and perennials.

some that could be considered tolerant, but that is much different than loving.

As trees grow larger and more are planted, the lawn begins to disappear. Seasonal sunlight shifts also cause the shade to lengthen and deepen, resulting in grass permanently retreating. Once the number of hours of direct sun sinks below six hours a day, the grass is gone or so sparse it looks unattractive. Unless you prefer bare soil, the choices are simple: cut down or trim back trees, or find shady lawn alternatives to fill the empty areas. Homes are more valuable and attractive with mature trees, so removing them or pruning them back may not be the best decision.

There are choices to explore when repurposing the former lawn area. You may begin by making the mulch rings around the trees larger, beyond the dripline, or simply connecting mulched trees to make one large bed. Plants in beds created beneath a tree's canopy may encounter competition from tree roots. Another choice could involve several beds with shade-loving plants with pathways wandering between them. Because of the lack of sunlight, concentrate on attractive plants and not flowers. With your new design, there will not be much in the way of plants to remove to begin the job. Get a soil test to determine if there are nutrients needed or the soil pH needs to be adjusted before plants are installed. Buy a MSU soil test self-mailer for \$25 online at www. msusoiltest.com.

Design your garden on paper before the first plants are purchased. Decide where paths and beds will be. Research your plant choices to make sure they will work in your new garden. When preparing the area, do not cover existing tree roots with topsoil. Try to work around the surface roots or simply don't plant in that location. Plants with shallow roots, like hostas, will adapt to this type of growing condition on their own.



Through the season, deepening shadows from nearby trees cause this lawn to loose density and quality.

Shady advice

Groundcovers are small plants that grow together to cover an area. Gardeners are only limited in the type of plants by their own imagination. Traditional choices include myrtle or periwinkle (*Vinca minor*), bugleweed (*Ajuga* species), lily-of-the-valley (*Convallaria majalis*), English ivy (*Hedra helix*), Bishop's weed or goutweed (*Aegopodium podagaria*) and pachysandra (*Pachysandra terminalis*). You might choose a plant that is particularly adapted to growing among tree roots such as sweet woodruff (*Galium odoratum*) and barrenwort or fairy wings (*Epimedium spp.*). Plants such as lilyturf (*Lirope sp.*) can be used to retain a slope, yet look like grass. Check to see if lilyturf is winter hardy in your area. Even the common violet could be used.

From a design standpoint, the same plant repeated many times over gives a static continuity. The plants listed above are small plants that may never exceed 12-18 inches in height. They may also be planted to grow around larger plants.

Consider that some of the plants listed above, like goutweed, may become invasive and therefore undesirable, especially if surrounded by a wooded area. Pachysandra does best in acidic soil, so it is important to know the soil pH before planting. These groundcovers will not cover huge areas; they work best in smaller beds. It will be important to keep them watered and well-weeded to prevent completion until they fill in.

Taller plants could be planted in groups and some, like hostas, come in a wide variety of sizes, leaf colors and patterns. Other choices include astilbe, Japanese painted fern, European ginger and *Ligularia*. While Japanese painted fern, astilbe, ligularia and ginger are critter-resistant, hostas are prone to deer damage and may require regular



Lawns in deep shade will be sparse and poorly populated.

repellant. Designing with taller plants will help break up the flat plane of short groundcovers.

Made in the shade

Shady areas are well-suited for native plants, too. If choosing native shade plants, make sure your type of soil will work with these forest dwellers. They appreciate a humus-organic soil with decayed leaves used as mulch. Common choices include ostrich and cinnamon ferns, jack-in-the-pulpit, Canadian ginger, May apples, trillium, Solomon's seal and false Solomon's seal, spring beauties and moss. A vine for shady areas is Virginia creeper. These are plants that are well-adapted to their environment and rarely require fertilizing. Some of these are classed as spring ephemerals, meaning they bloom and disappear by the end of spring to reappear again in the spring. Trilliums are very attractive to deer.

Complete the transformation

Be sure to mulch around plants with woodchips or broken down leaves (leaf mold) to prevent loss of soil moisture. Add paths using woodchips, pea gravel or pavers to surround planting beds. Pavers or bricks could work as edges of beds or as path material. Consider a bench to sit on or several chairs. Add some vertical interest with a small fountain, bird bath, trellis or some attractive garden art.



Perennials with good foliage color such as Heucherella and Pulmonaria make great shady ground covers.



Deep shade of this maple is the perfect spot for Epimedium.

Finding accurate information on the Internet

The Internet is a valuable source of information, however Smart Gardeners must take caution to assure the information is correct.

Faith Cullens, Michigan State University Extension

We've all heard the joke "If it's on the Internet, it must be true!" In reality, anyone can create a website and put information on the Internet whether it's true or not. Often, entities that are selling a product will only list information that supports their products. It is important as consumers that we seek out balanced, factual information. Many Smart Gardeners use the Internet as a valuable resource to increase their knowledge on a wide array of subjects, but how do we sort through all of the correct and incorrect information available to us? Fortunately, there are some clues that can indicate whether the information is credible.

Author's credibility

The author should be clearly identified and their credentials should be relevant to the topic. An author writing an informational piece will have their related

credentials listed. Don't be fooled by titles. A person with a PhD can be listed as Dr., but it does not mean he or she is an expert in all subjects. The PhD should be in a field related to the topic and the author's current position should be clearly identified.

Fact checking

In general, websites with more citations and links provide better information. On a website you are unsure of, it is a good idea to spot check facts with more reputable websites or research papers. Even in articles written by reputable sources, the author may show bias, so it's still a good idea to look at multiple sources.

Website sponsor

A website sponsor with a vested interest in making a profit is not likely to provide balanced information. Often website sponsors appear on the sidebars of a website or across the top. The "About Us" section of a website will often indicate who the website is sponsored by.

Web address

The ending of a web address can give you clues as to the reliability of the information.

Websites ending in .gov means the website is owned and operated by the government. No one but the government can use .gov, so you can feel safe about the content of the website.

Websites ending in .edu is always affiliated with universities, colleges and educational sites. Usually you can feel safe about the trustworthiness of the content; however, many universities let students host websites using .edu, so not every website is authored by an educator.

Websites ending in .org was originally set up for nonprofit organizations, but the designation no longer exists today. This domain extension is often used for non-profits such as schools and communities, but is also used by for-profit entities.

Websites ending in .com or .net are open to the public to use. Keep in mind that some websites ending in .com or .net that offer scholarly advice are trying to sell you their product.

Be alert if...

- The website sponsor is for-profit.
- The authors' credentials aren't related to the topic.
- The address ending has .com, .net or .org.

Be assured if...

- The author is qualified to discuss the subject.
- The information was reviewed by a qualified person.
- The web address ending has .gov or .edu.

Looking for more?

For more information on a wide variety of **smart gardening** topics, or to find out about smart gardening classes and events, visit www.migarden.msu.edu.

Don't forget to visit us at these upcoming 2014 shows: Cottage and Lakefront Living Show: February 27-30 in Novi, MI West Michigan Home and Garden Show: March 6-9 in Grand Rapids, MI Lansing Home and Garden Show: March 13-16 in East Lansing, MI

Stay up-to-date with resources and news for home gardeners by signing up at http://bit.ly/MSUEDigestSignup to receive MSUE Home Gardening Production Digests via email.

MICHIGAN STATE UNIVERSITY

Extension MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability,

political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Thomas G. Coon, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned.