Acreage Living

July 2008 www.extension.iastate.edu/acreage/

In This Issue

Acreage Living is published monthly. Please share it with your acreage neighbors. Call your local ISU Extension Office for more information or contact an ISU Extension staff member listed below to suggest topics for future articles.

Editors:
Paul Brown
Assistant Director
Ag & Natural Resources Extension
pwbrown@iastate.edu
(515) 294-7801

Shawn Shouse
Extension Field Specialist
sshouse@iastate.edu
(712) 769-2600

Designer:
Paulette Cambridge
paulette@iastate.edu
(712) 769-2600

Rain Gardens in the Home Landscape Help Protect the Environment

By Ann Marie VanDerZanden, ISU Associate Professor and Extension Horticulture Specialist

Rain gardens have received a lot of attention as a way to contain water draining off roofs and flowing over impervious surfaces. Local and state agencies are encouraging home owners to build rain gardens to work towards cleaner groundwater and stream and lake water. This month I completed the Rain Garden Training program supported by the Iowa Storm Water Education Program and the Iowa Association of Municipalities among other state agencies. I encourage others who are interested in rain gardens to contact these agencies. During this intensive daylong training I learned about the benefits, applications and details of rain gardens.

What is a rain garden?

In brief, a rain garden is a specially designed and slightly depressed site where rain water can be collected and allowed to slowly percolate through the soil profile. Rain gardens collect rain water near where it falls rather than allowing the water to move quickly off the site. An additional benefit of rain gardens is that the rain water is filtered through the soil and plant roots, thereby removing impurities and soil particles. This results in cleaner water entering the groundwater.

To function properly and provide the most benefits, a rain garden must be situated in the right location, designed correctly, planted with the right plants and receive adequate maintenance. With a little planning and forethought, it is relatively easy to create a highly effective rain garden.

Selecting the location

Locate the garden at least 10 feet from a house to prevent water seeping into the basement. The garden should not be located at the lowest point

continued on next page

continued from previous page

in the landscape where water already pools because it may not drain in the recommended 48 hours.

Rain garden design

The garden should be designed so it is large enough to handle the rainwater you plan to divert to it. The ideal size can be determined by garden depth, soil type, size of roof and lawn area to be drained. The finished grade of the garden should be about 4-6" lower than the surrounding landscape and the soil needs to have enough sand or loam so the water will percolate freely.

Plant selection

Careful plant selection is an important part of a functional rain garden. Rain garden growing conditions (standing water, followed by possible extended drought) can tax the hardiest plants. Native and adapted perennial plants which naturally thrive under these conditions are best suited for rain gardens. However, the environmental conditions will vary in each garden and will impact which plants you choose.

Rain garden maintenance

Like any newly planted area, the plants in a rain garden will need weeding and supplemental watering during the first two years to become established. After that, plants should be able to adapt to the fluctuations in natural rainfall except during times of extended drought. Annually, plants will need to be cut back and may require new mulch.

Homeowners can help manage storm water by integrating rain gardens into their home landscapes.

More information on rain gardens

RG 605 Rain Gardens: Filtering and Recycling Rain Water online at http://www.extension.iastate.edu/Publications/RG605.pdf or ask for it at your local county extension office.

Rain Gardens: A how-to manual for homeowners
A detailed 32-page manual that covers rain garden sizing and site, construction details and planting and maintenance. Includes 11 conceptual planting designs with plant species lists.
University of Wisconsin Extension http://clean-water.uwex.edu/pubs/pdf/home.rgmanual.pdf

Iowa Storm Water Education Program.
http://www.iowastormwater.org/index.htm
http://www.iowastormwater.org/Rain%20Gardens/Rain%20Garden%20Page.htm

Should I Sell My Extra Produce at a Farmers' Market?

By Andy Larson, ISU Extension Small Farms Specialist

We are approaching that time of year when Iowa home gardeners have more tomatoes, green beans and zucchini than they can use. The recent buzz about local foods makes you wonder, "Could I make a few bucks selling my extra produce at a farmers' market?"

The answer may not be as simple as you think…

The number of farmers' markets has skyrocketed, but few markets are so loosely organized that they allow anyone with a vehicle and a table to sell food. Most markets are administered by a market association with a market master who can provide rules as well as a vendor application.

Market documents should detail

- hours and season of operation,
- what kind of vendors may sell and whether they may sell only products they produce,
- what types of products may be sold,
- necessary permits or licenses required, and
- the schedule of fees.

continued on next page

continued from previous page

Guidelines are established with the safety of the customer and the character of the farmers' market in mind.

Occasional selling at farmers' market

Some farmers' markets do have daily vendor rates. If you are considering selling at a farmers' market regularly, this can be good practice to get familiar with the market master, market regulations, other vendors, and regular customers. However, there are a few things to consider before spending six or seven hours of your weekend trying to sell excess produce.

First, it is highly likely that you are going to have extra produce at the same time as everyone else (think zucchini). If you can't give the stuff away, chances are slim that you will be able to sell it. Second, just because you don't use pesticides does not mean that you are certified organic and thus able to command a premium price. You could possibly sell your produce as "unsprayed," but organic certification takes a serious commitment of time, planning and paperwork.

Finally, if you are bringing your produce to a farmers' market just to "get rid of it" and you deeply discount your prices, you will likely be undercutting those growers who are trying to make a living at the market. Customers generally perceive products that cost almost nothing to be worth just that. Consumers who regularly shop at their local farmer's market often have favorite vendors they support.

Other options for excess produce

Consider donating excess produce to local charitable organizations such as shelters, soup kitchens, halfway-houses and food pantries that will be able to use it immediately and in quantity. Your local county extension office will be able to make suggestions. If you must, feed your excess produce to livestock or compost it; you will get some benefit from the nutrients the plants used. Next year, cut back on the number of plants you start. And if you do have too many, it's easy to give away extra seeds or transplants to others that would not otherwise think about growing a garden, thus helping them take a small step towards self-sufficiency.

Getting serious about selling

If you are interested in farmers' market sales, start getting ready for next season now. Visit local markets to get to know vendors and gauge which market you'd like to join, inquire about costs and permits, start preparing signs and displays to help make your farm bounty look even more appealing, read up on which varieties of fruits and vegetables perform best in your area and learn what kind of post-harvest handling is necessary to keep produce looking nice even after hours in the sun at market. If you make a plan, pay attention to detail, tell your story and most importantly, really love building relationships with people, you could certainly become a successful farmers' market vendor.

For information on selling to foodservice markets, see publication PM 2045, What producers should know about selling to local foodservice markets, online at https://www.extension.iastate.edu/store/ListItems.aspx?Keyword=PM2045 or ask for it at your local county extension office

Select Outdoor Yard Lights for Security and Energy Savings

By Shawn Shouse, ISU Extension Agricultural Engineer

Many rural residences and farmsteads use yard lights to provide night security and to illuminate driveways and buildings after dark. Selecting the right light will produce the results you want while saving energy.

How much light?

Light intensity is measured in foot candles. One lumen of light energy falling on one square foot creates one foot candle. For general yard security and movement, a light intensity of one half to two foot candles is recommended. This light intensity can be created by 100 to 175 watts of lamp size mounted 25 feet above ground and serving no more than 8,000 square feet.

continued on next page

continued from previous page

Higher light intensity may be desired in areas of high activity or near building entrances.

What type of light fixture?

Unshielded lamps send light in all directions. Even standard downward-facing fixtures can lose one third of their light to the sides. A full parabolic reflector fixture will direct the most light to the ground in your target area and allow desired light intensity with a smaller lamp.

What type of lamp?

Lamp efficiency is measured in lumens of light per watt of electric consumption and varies by lamp type. Some lamps are slow to start or to reach full intensity.

Standard incandescent and halogen lamps produce only 15 to 20 lumens per watt, but come on almost instantly. These lamps are fairly short-lived, but do not suffer from frequent on-off cycles. They are best where use time is short and the lamp is easy to access to change bulbs.

Compact fluorescent lamps create 45 to 60 lumens per watt, but take a minute or two to warm up to full output. Unlike standard fluorescent tubes, most compact fluorescents will start reliably in colder temperatures.

High intensity discharge (HID) lamps such as mercury vapor, metal halide and high pressure sodium lamps have high output efficiency of 30 to 100 lumens per watt and a long life. They require time to start and are best used where they are left on for extended periods. Metal halide lamps are nearly twice as efficient as mercury vapor, and high pressure sodium lamps are nearly three times as efficient.

For general yard lighting that will stay on for extended hours, high pressure sodium is often the lamp of choice, followed closely by metal halide. A typical 175-watt mercury vapor yard light running dusk to dawn will cost about 75 dollars per year to operate. Replacing this mercury vapor fixture with a 100-watt high pressure sodium fixture will provide the same light with lower operating cost and pay back the cost of the fixture replacement in two to four years.

What controls are needed?

Many yard light fixtures come pre-wired with a photocontroller that will turn the lamp on at dusk and off at dawn. Extra energy can be saved by using a controller that can additionally turn the lamp off for the latter portion of the overnight hours. Called "half night" or "selectable time" photocontrollers, these devices save energy and reduce unwanted light pollution.

For local area lighting at building entrances, walkways or work zones such as fuel tanks, consider motion sensor controls with halogen lamps.

Good yard lighting increases safety, provides security and enhances the appearance of your residence. Choosing the right light for your needs can improve effectiveness and save you money.

Information for this article was gathered from these good resources:
Ag Energy: Outdoor Lighting, by Scott Sanford, University of Wisconsin, http://www.uwex.edu/energy/lighting_OL.html
Energy-Efficient Agricultural Lighting, by Scott Sanford, University of Wisconsin, http://learningstore.uwex.edu/pdf/A3784-14.pdf
Living On Acreages: What You Need to Know, MWPS-50, Midwest Plan Service, order from the ISU Extension Online Store at https://www.extension.iastate.edu/store