



Acreage Answers

Saving Energy at Home

by Donna Donald, ISU Extension Family Life Specialist

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Only yesterday we were looking for ways to slash home heating costs. Now summer heat finds us looking to save on air conditioning costs. Luckily many of the energy saving ideas work year round.

- * Clean or replace filters once a month and clean registers.

- * Keep window coverings on the south and west windows closed during the day to keep out heat. Install white or light colored shades, drapes, or blinds.

- * Don't place lamps or TV sets near air conditioner thermostats. The thermostat senses heat, and may cause the air conditioner to run longer than necessary.

- * Use ceiling fans or portable fans to help circulate cooled air instead of lowering the thermostat. Change the direction of ceiling fan blades. The blades should turn clockwise in the summer to push air down. Run the blades counter-clockwise in the winter.

- * Run heat producing appliances during the cool evening hours.

- * Avoid using the oven on hot days. Grill outside, cook in the microwave or serve cold meals.

- * Wash full loads of dishes or clothes. Consider hanging clothes outside to dry.

After you try the quick ideas to save energy. Consider these long-term changes to reduce energy use in your home.

- * Plant shade trees or shrubs to shade air conditioning units but not block the airflow. Air conditioning units operating in the shade use 10% less energy.

- * Plant deciduous trees on the south and west sides of the house to shade during the summer, but allow winter sun to warm the house.

- * Consider installing a whole house fan that pulls cool air through the house and exhausts warm air from the attic. This works especially well at night when the air is cooler outside the house.

- * Install a programmable thermostat that automatically turns the temperature up at night and lowers it during the day. You can save as much as 10% on your heating and cooling a year by turning the thermostat back 10-15% for 8 hours each day.

- * Replace single pane windows with double pane energy efficient windows.

- * Review the amount of insulation in your attic, walls and around the foundation of your home. Add insulation to save energy and improve the comfort level of your home.

- * Request an energy audit from your local utility. Many provide the service at no cost. Then implement their suggestions.

- * Check out the U.S. Department of Energy web site. It contains a wealth of information to improve energy efficiency. The address is <www.doe.gov>.

Fall Deck Care

By Doug Stokke, Forest Products Extension Specialist

Please share *Acreage Answers* with your acreage neighbors. Call your local ISU Extension office to be placed on the mailing list for *Acreage Answers* and to give us suggestions for future articles.

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Acreage Answers is available on the web at www.extension.iastate.edu/polk/ag/newsletters.html

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Cooperative Extension Service, Iowa State University of Science and Technology, and the United States Department of Agriculture cooperating.

If you have a wooden deck on your home, fall is a great time to inspect it and perform any needed maintenance so that it will be ready to enjoy throughout the fall and next spring. For inspection, all you need is a pocketknife, ice pick or small screwdriver (to use as a probe for decayed wood) and perhaps a flashlight (to look at structural members under the decking). Take a little time to look over your deck, top and bottom. Underneath, it is important to look for signs of decay or insect damage that might be revealed by discoloration or splitting of the wood. Use your knife to probe areas you suspect of decay. If your knife can easily penetrate the wood (beyond the first quarter of an inch or so), you may have decay present. Areas most likely to deteriorate first are at the base of supporting columns. Look carefully at joints where the deck joists are attached to the home, and be sure not to overlook the surrounding areas of the home itself. Structural members with decay, excessive splitting, or loosening of fasteners should be repaired or replaced to maintain the usefulness and safety of your deck.

The upper part of the deck should also be inspected for decay, but here, it is more likely that you may find splits, loose fasteners, iron stain from nails or screws, or wood in need of refinishing.

Iron stain (dark black discoloration) may be removed with a saturated solution of one pound of oxalic acid in one gallon of hot water (*warning*: Avoid ingestion and contact with your skin). Apply the solution, allow to soak for a few minutes, then rinse thoroughly with clean water. Replace offending screws with non-corrosive deck screws. Rough areas may be sanded with 80 to 100 grit sandpaper and refinished. For refinishing, use your choice of either a water repellent or a semi-transparent penetrating stain. Finishes formulated especially for decks are usually preferred as these contain higher amounts of water repellents and are more abrasion-resistant than are stains and finishes intended for exterior siding. First clean the deck with a dilute solution of household bleach (1 quart bleach to 3 quarts water), rinse thoroughly, and let dry for 1-2 days before applying the finish according to the manufacturer's recommendations.

For more information on deck care, visit the USDA Forest Products Laboratory web site <http://www.fpl.fs.fed.us/pubs.htm> #Lists and click on the link entitled "Wood Deck Construction and Maintenance - - Selected Publications".

Tree Planting Basics

by Jeff Iles, Associate Professor of Horticulture Iowa State University

Anyone can plant a tree, and attention to proper planting techniques will help insure your newly-installed trees will have long and useful lives. But before you even think about digging a hole, call **Iowa One Call 1-800-292-8989** to locate buried utilities.

Planting holes for bare-root, container-grown, and balled and burlapped trees should accommodate their root systems comfortably. The completed hole should be at least 1-foot wider than the width of the root mass, and even wider in poor soils. Hole depth should allow the tree to be positioned so that the root collar (trunk flare) is level with, or slightly higher than the surrounding ground. Soil removed from the hole can be used as backfill.

Planting bare-root trees is made easier by building a firm, cone-shaped mound of soil at the bottom of the hole. This allows roots to be spread evenly in the hole. When the tree has been set at the proper depth, backfill soil can be added and carefully worked around the roots. After backfilling is complete, watering will eliminate undesirable air pockets.

To determine proper hole depth for balled and burlapped trees, peel back the burlap from the top of the rootball and look for the flared trunk base that



indicates original ground level. Do not plant trees too deeply. Gently lower the tree into the hole. Backfill layers of soil around the rootball until one-half of the hole is full. At this point, remove all twine from around the trunk, the top one-third of the wire basket, and burlap covering the top one-third of the rootball. Now backfilling can be completed.

Container-grown trees are planted in a similar fashion, but only after their containers have been removed. And if trees grown in containers have become root-bound, the congested mass of roots should be disrupted by making several vertical cuts the length of the rootmass.

For more information about planting trees, consult Pm-1591, *Community Tree Planting and Care Guide*.

Identification of Common Iowa Trees

ISU Extension Forestry Department & Horticulture Department has developed an interactive web site that you can use like a key to identify trees. The key is based on visual differences in leaves, fruits, and bark. To identify a tree, you will make a series of choices based on sketches and descriptions of the trees. By the process of elimination, you will be able to identify the tree. To use this interactive key, access the web pages on the internet at: <http://www.extension.iastate.edu/pages/tree>

Fall Prairie Seeding Site Preparation

by: Steve Lekwa, Story County Conservation Director

Fall is a wonderful time to plant a new prairie. It's less hurried since seeding can occur right up to freezing. Forbs, flowering prairie plants, do particularly well when seeded in the fall after soil temperatures are cool enough to prevent germination, usually after mid October. Site preparation needs to begin in late summer in order to be ready in time.

The goal in any prairie seeding is to start with a firm, weed-free seedbed. Soybean stubble is a nearly perfect seedbed with little additional work. A light disking or dragging may be desirable if the rows are too rough. Corn stubble is more difficult to prepare, and has a higher probability of damaging chemical carry over. Conversion of turf grass to prairie requires suppression of the perennial cool-season turf prior to seeding prairie. This can be accomplished with a chemical like Roundup applied at labeled rates, and/or by conventional tillage. Direct seeding into dead sod is possible if a no-till planter is available. If not, the sod must be broken up sufficiently to form the desired firm seed bed. It will likely take multiple passes with conventional farm equipment (plow, disk, drag), but a large rototiller can break it up faster. Rototilled soil tends to be too fluffy for good prairie seeding, so a firming pass or two with a roller may be needed before and after seeding.

Ring-necked Pheasant Habitat

Ring-necked pheasant populations have been declining since the 1940's. At that time populations were estimated at 500 per square mile throughout Iowa. As of the 1970's pheasant populations have been estimated at less than 15 per square mile in many Iowa Counties.

Destruction of safe nesting habitat is the primary reason for the drastic population decline. Row crop expansion has destroyed the once prevalent safe havens of the ring-necked pheasants. These areas included fields of small grains, pasture, and idle grasslands.

There are many programs now offered to assist private landowners that are interested in putting habitat back on the landscape. Depending on the individual tract of ground, the USDA Conservation Reserve Program could be an option or perhaps the US Fish and Wildlife Partners. The local Pheasant Forever Chapter also offers free seed for food plot establishment.



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If you have an interest in restoring or enhancing existing wildlife habitat, assistance can be found with one phone call. To start the process of improving habitat on your private ground, call your local Natural Resource Conservation Service office. (You can find their local number in the government pages under the USDA listing.)



Aquatic Plant Management

By Dr. Joe Morris, ISU Extension Fisheries/Aquaculture Specialist



Many different aquatic plants can be found in ponds. These ponds range from algae that drift suspended in the water to larger plants rooted in the pond bottom. Moderate plant growth is essential to ponds because they produce oxygen, food, and cover for fish and other aquatic animals. Excess nutrients from the surrounding watershed along with shallow water depths can combine to produce ideal habitat for aquatic plants. These aquatic plants become "weeds" that need to be controlled when they render the pond unusable for fishing or cause the pond to be less desirable for the pond owner.

A good aquatic plant management plan includes preventative methods (proper pond construction and maintenance), biological control (grass carp), mechanic controls (physical removal), cultural methods (use of rocks or riprap along shorelines to prevent erosion and aquatic weeds), and chemical controls (herbicides). Developing this plan depends on correctly identifying the problem weed(s) and selecting control methods that are compatible with efficient pond usage, e.g., sport fishing, animal watering, irrigation or swimming while also controlling the weed in question.

Visit with your local Extension office for publications on aquatic plant management, pond construction as well as fisheries management.

(Clip art courtesy of IFAS, Center for Aquatic Plants)

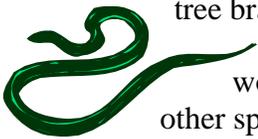
Discouraging Snakes and Mice

by Dr. Jim Pease, ISU Extension Wildlife Specialist



What's your least favorite Iowa wildlife species? For many, it would be the snake they encounter in the basement or yard. For others, it would be the mice that invade their kitchens and pantries. For some, it would be both! Homeowners wishing to limit their encounters with both must limit the habitat available to them.

To prevent mice, snakes, and even insects from entering your home, keep your foundation in excellent repair. Entrances are often hidden beneath your siding where it overlaps your foundation or beneath door jams. Stuffing this area with steel wool and then filling the space with expanding spray foam insulation (available at hardware stores) will prevent uninvited guests from entering. Keeping roof overhang vents and wood in good repair will prevent climbing mice from entering in those areas also. Trimming back tree branches that overhang your roof discourages mice as well as squirrels and chipmunks from gaining access to your roof area. Lastly, cleaning up hiding places like boards, wood piles, or piles of junk in the yard, limits the habitat available for these and other species of wildlife.



For more information about Iowa wildlife-whether you want to attract them or discourage them-see ISUE Wildlife Programs' website at: <http://www.extension.iastate.edu/wildlife>.



Fall Lawn Care

by Mohamad Khan, ISU Extension Horticulture Specialist

Fall is the time to begin renovation of worn out, diseased, or insect-damaged lawn. Look out for white grubs in the lawn during the month of August. If the grass begins to wilt or turn brown, investigate by pulling up the sod. White larvae with brown heads will form a "C" shape when the sod is removed and should be noticed if grubs are present. Also, large numbers of birds feeding in the lawn is an indication that grubs are present.

Grubs can be controlled with several insecticides available at the garden stores. Some have longer lasting effect but can be more costly. It is not necessary at this time to use a very long lasting insecticide, since the white grubs have an annual life cycle and will only feed until early October. Make sure the grubs are present before applying an insecticide and always read the label carefully before using.

Plan to seed damaged areas of the lawn by the end of August. Use Glyphosate (Roundup) to control perennial weeds, mow the lawn low to remove debris and introduce new seeds. Use a drill seeder or slit seeder to drill grass seeds in the soil. A combination of five or more new varieties of bluegrass should be used. Before seeding, apply a starter fertilizer. After seeding, use a sprinkler system to wet the area until the grass is established.

Your local Extension office has several publications available for more information.

PM 1063	Turfgrass Management Calendar
PM 1057	Maintenance, Fertilization of Turfgrasses
PM 1113	Calibration & Maintenance of a Fertilizer Spreader & Lawn Area Calculation
PM 1675	White Grubs in the Lawn