



Acreage Answers

ASSISTANCE WITH PRESCRIBED BURNING

by Tanya Meyer, Natural Resources Conservation Service

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Fire has influenced plant communities for millions of years. During the past five or six thousand years, Native Americans burned for many reasons, including improved game habitat, greater nut and berry production, and easier traveling.

The most obvious effects of a burn are easily seen. Fire rejuvenates a prairie. More plants flower, produce seed, grow taller, and are generally more robust than the previous year.

Fire lengthens the growing season for most native prairie plants and shortens it for many Eurasian weeds. Fire increases available nutrients in the soil and releases a small amount of nutrients from the ash. Fire also controls the invasion of shrubs and trees.

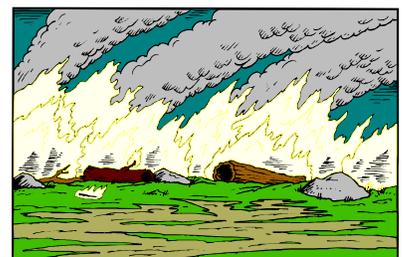
Fire lengthens the growing season for warm-season native plants by burning off accumulated leaf litter in the spring and exposing a darkened soil surface to the warmth of the sun. Without fire, the light-colored leaf litter reflects the sun's rays, insulates the ground, and slows the soil-warming process.

Most prairie plants grow best in warm soil. The sooner the soil warms up, the sooner the plants start growing. This may extend the growing season for up to four weeks. A spring fire does not damage prairie plants because most have buds that lie underneath the soil, where they are protected.

Fire shortens the growing season for many Eurasian weeds (cool-season plants that originated in Europe). Bluegrass, quackgrass, and brome grass are examples of cool-season plants that are serious weeds in some prairies.

The same fire that encourages warm-season plants, discourages cool-season invaders by advancing the onset of warm soil temperatures. Warm soil can cause the roots of some cool-season grasses to stop growing.

Contact your local USDA Natural Resources Conservation Service (NRCS) for more information about prescribed burning and/or to develop a burn plan. ❖



LAWN MANAGEMENT PROGRAM

By Gary Peterson, ISU Extension Commercial Horticulture Specialist

IOWA STATE UNIVERSITY Cooperative Extension

Please share *Acreage Answers* with your acreage neighbors. Call the ISU Extension Polk County office to be placed on the mailing list for *Acreage Answers*.

Barbara Hug, County Extension Education Director
Email x1hug@exnet.iastate.edu

ISU Extension Polk County
5201 NE 14th Street, Suite A
Des Moines, IA 50313

General Number
515-263-2660 (option 1)
Fax: 515-961-6017

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

close to roots of newly planted shrubs or trees.

APRIL

- Control Crabgrass: Apply Dacthal, Team, Pendimethalin, Barricade, Balan, Dimension *when lilacs and Forsythia start to bloom.*

- Apply control only if weed infestation justifies.

OCTOBER - NOVEMBER

- Fertilize with 1 pound Nitrogen per 1,000 square feet.

FERTILIZATION

This program will give you a total of 3 pounds Nitrogen per 1,000 sq feet.

1pound Nitrogen equals:
5 lbs of a **20-0-0** per 1000 sq. ft.
4 lbs of a **25-0-0** per 1000 sq. ft.
3 ¾ lbs of a **27-3-4** per 1000 sq.ft.

Turf needs: 1 - 1 1/2" water per week.

Grass should be mowed when it reaches approximately 3", remove clippings to landfill. ❖

MAY-JUNE:

- Fertilize with 1 pound Nitrogen per 1,000 square feet or apply when grass starts to lose its good green color.

AUGUST

- Control grubs - Diazion, Oftanol, Dylox, Turcam, Triumph, Merit, Mach2
- Apply only if numbers justify application. Product needs to be watered in to reach the grubs below the soil surface.
- Apply controls if:
5-8 grubs/sq ft in *non irrigated* turf or
8-15 grubs/sq ft in *irrigated* turf.

SEPTEMBER

- Fertilize with 1 pound Nitrogen per 1,000 sq feet.
- Control broadleaf weeds using Trimec.
- If you have Ground Ivy, it may take two applications, 10-14 days apart. Do not get



ROTATIONAL GRAZING

By Carl Neifert, ISU Extension Livestock Specialist

Rotational Grazing, sometimes called Management Intensive Grazing, MIG, is the easiest way to increase pasture production. Continuous grazing of pastures results in the lowest possible pasture yields, because the forage is not allowed to rest between grazing.

Under MIG, only one section of pasture is grazed at a time. To do this, your total pasture area is divided into smaller pastures called paddocks. Livestock is moved from paddock to paddock. MIG allows

forages to renew plant reserves, rebuild plant vigor, extends the grazing season, and reduces the need for stored winter feeds.

The major capital cost to start MIG is fencing. For new parameter fences, construction costs can run from \$.60 to \$.90 per foot for high tensile wire systems. Division fences for paddocks will cost \$.15 to \$.25 per foot for single strand polywire fences.

Access to water is the other key component for each paddock.

Water sources can be a stream or creek, a fenced pond, or a



temporary plastic pipe on top of the ground with a tank. Try to

keep the water source within 750–800 feet of animals. Water at greater distances will cause over grazing of forage near the water source, under grazing of forage farther away, and greater capacity and space at water source. ❖

HORSES & PASTURE

By Dale Miller, County Extension Education Director, Marion County



Trying to keep horses on a small acreage is not easy. Most acreage owners wonder how do you keep

your pasture area from becoming a grassless, treeless, semi-barren exercise area? First, most people have far less acreage than they really need.

The USDA recommends a minimum of 1½ to 2 acres of pasture per horse in the Midwest. This is called the grazing capacity of the land or “stocking rate.” With the weather extremes we have seen, a few extra acres grazing capacity is usually needed to

keep horses in plusher pastures.

So, what if you don’t have enough pasture acres? Here are some suggestions:

- ✓ Feed supplemental hay to meet your horse’s forage needs.
- ✓ Give horses short but frequent pasture turnouts of 1 hour at a time.
- ✓ Fertilizing and interseeding will likely be necessary to maintain your pasture.
- ✓ Mowing or clipping your pasture will help control weeds and stimulate growth
- ✓ Dragging or harrowing your pasture will distribute

manure and reduce parasites. (Horses won’t graze where they leave manure, so part of your pasture will not be grazed)

- ✓ Create multiple paddocks (small grazing areas using electric fence) and rotate grazing.
- ✓ Rotate grazing time between paddocks. (Grass needs rest to recover and regrow)

Check your pastures closely. If you see more soil than grass, you need help! ❖

NONINSURED CROP DISASTER ASSISTANCE PROGRAM (NAP)

*By Beth Grabau, Dallas
County Farm Service Agency*

The Noninsured Crop Disaster Program (NAP) provides for crop loss protection for all crops commercially produced for food or fiber that are not covered by Federal Crop Insurance. This program is designed to reduce production risks and financial losses when natural disaster causes a catastrophic loss of production or the prevented planting of an eligible crop.

Examples of eligible crops covered by the program are alfalfa, forage crops, apples, aquaculture, fruits, vegetables, turfgrass sod, seed, honey, etc. To qualify for crop loss protection, producers of eligible crops shall:

- Annually file a report of acreage by June 30
- File a notice of loss within 15 days after the date the disaster occurred or became known
- Comply with HELC/WC, payment limitation provisions

- Provide production records to document for the year of the loss
- Production records for prior years to establish an approved yield for program purposes.

Contact your local Farm Service Agency for more information regarding this program.❖



CROP REPORTING

*By Beth Grabau, Dallas County
Farm Service Agency*

Each year Farm Service Agency offices take crop reports or certification from producers of all types of crops. Producers report the type of crop, number of acres of each crop, and the intended use of the crop. These crop reports can be used for program eligibility determinations for existing and future programs. Crop reports are completed after the crop has been planted and before June 30. A late-filed fee is charged on crop reports received after June 30. The crop reports are especially important for producers of noninsurable crops (as discussed in preceding article), CRP producers, and producers interested in price support benefits.❖

Developing a Business In Fruit & Vegetable Production

April 11, 2000
6:30 - 8:30 pm
and
April 27, 2000
6:30 - 8:30 pm

A two-part ICN (Iowa Communications Network) program to help existing/future fruit and vegetable growers explore different marketing outlets. The program will consist primarily of Iowa producers and the unique techniques that they use to market fruit and vegetables. Cost will be \$15 for both sessions.

Registration deadline is
April 3, 2000

Local sites include Story County (Ames ISU 4) and Warren County (Liberty Center, SE Warren HS). Other sites are available throughout the state. For more details call Deann Nelson, Linn County Extension Office at 319-377-9839 or e-mail at x1dnelso@exnet.iastate.edu

Rural Water Systems

By Dorman Otte, Program Director, Rural Utilities & Community Facilities USDA Rural Development

Regional rural water systems are the new kids on the block for providing water service to rural areas. Rural Water Systems are improving the quality of life, giving reliable water service, and having a positive economic impact to rural families and businesses. Farmers and rural businesses are now able to make business plans with the assurance that water is not one of the limiting factors for a successful livelihood. Small communities that purchase water from a regional water system now have an affordable service for citizens and businesses.

The first system constructed was Rural Water No. 1 near Hospers in 1971. A group of farmers organized a nonprofit corporation and signed up users to support a loan from the Farmers Home Administration, predecessor agency to Rural Development. The corporation hired an attorney and consulting engineer to guide them through the legal and design process. These first 100 or so users started the model for what future systems would look like. Since that time 19 additional regional water systems have formed and they now provide service to more than 75,000 rural residents in all or parts of 60 counties and to nearly 250 communities. USDA Rural Development has provided more than \$360,000,000 in financing to

these water facilities available. Over the last 15 years funding from the Community Development Block Program managed by the Iowa Department of Economic Development has been a significant partner. Their grants have allowed rural areas and most communities to have a source of water that would not otherwise have been available.

The growth of the rural water industry continues.

While new areas are being served by these existing rural water systems, they continue to add users and cities within their current boundaries. A number of systems are furnishing supporting services such as contract operations with existing community water and sewer systems. All of the rural water systems have professional staff, many have their own equipment for construction and repairs, and most of all they desire to be of service in their area of service.

Rural Development is pleased to be a part of supporting rural areas and communities through our financing. We have seen stability of communities, increased livestock opportunities, housing starts and support of utility needs for business and industry enterprises.



Tree Planting Decisions

The best time to plant trees is in early spring well before bud break. Bare-root trees can be planted as soon as soils become workable in early spring but should be in the ground before buds swell and new growth begins. Container-grown balled, or burlapped trees may be planted in early or late spring, in early summer, or early fall.

Plantings made in mid-summer, late fall, and winter are more prone to failure.

Before planting, thought must be given to the planting site. Trees chosen for a project must fit their intended site both now and at maturity, be compatible with the given environmental conditions, and not pose unusual maintenance problems. Important questions to be answered before planting begins are:

- What is the ultimate size and shape of the tree?
- What maintenance will the tree require?
- Will the tree thrive in the site's microclimate and soil conditions?
- Will tree species that tolerate de-icing salt be used near roadways? Will trees interfere with snow removal?

More information can be found in the "Community Tree Planting & Care Guide" available for 50 cents at the county Extension office.

Mold and Mildew

By John Adams, *Healthy Home Project Educator, ISU Extension Polk County*

Identification

Mildew is produced by mold. To control mildew you must control mold. A musty odor is often an indication of mold growth.

The air carries mold spores. They are so common and so prevalent that the growth of mold from these spores can occur in any house given the right mold-growing environment.

Mold thrives in a warm, damp, stagnant, and poorly lit environment. Consequently, mold and mildew are often found in basements, crawl spaces, around plumbing, and in storage areas.



The best conditions for mold growth are:

- A host of organic material such as: cotton, wool, paper, wood, grease, food, soil, and leather.
- Temperature between 77 and 86 degrees Fahrenheit
- Moisture supply either on the host material or from the air. A relative humidity of 70 percent is optimum.
- Abundant oxygen.
- Darkness.
- Poor air circulation.
- Mold spores.

Prevention

Prevention of mold requires creating an environment that is not conducive for the growth of mold. A combination of the following techniques is the most effective for curtailing the growth of mold and preventing mildew:

- Organic material — Keep surfaces of walls, cupboards, counters, and floors clean. Keep clothing clean. Synthetic fabrics are less susceptible to mold.
- Temperature — Freezing does not kill mold. Since we live in the same temperature range as mold, there is not a lot that can be done without causing ourselves discomfort.
- Moisture supply — Try to keep relative humidity around 40 percent. Repair leaky plumbing. Vent clothes dryer to the outside. Vent the bathroom and the kitchen to the outside. Eliminate backdrafting of combustion appliances.

Ventilate storage areas, basements, and crawl spaces. Use dehumidifiers and air conditioners to dry the air.

Do not put damp clothes or towels into a laundry hamper. Dry spills immediately (especially on rugs or carpeted areas). Furthermore, do not let

water stagnate in drip pans, dehumidifiers, humidifiers, and air conditioners.

- Oxygen — Since we require oxygen the elimination of oxygen to control mold is not a good option.
- Darkness — To be more specific, ultraviolet rays kill mold. Light inhibits mold. Expose fabric to the sun periodically. 
- Air circulation — The movement of air is beneficial in two ways. It eliminates stagnant air and it helps to decrease moisture. Open windows and doors for a periodic “airing out”. Be sure to open closet and cupboard doors also. If you cannot move the air naturally, you may need to use a fan to force air into stagnant corners.
- Mold spores — Mold spores will be in abundance where mold is allowed to grow. A quick cleanup as soon as possible after the discovery of a mold growth will reduce the number of spores in the air.

Use your nose as well as your eyes to check for the development of mold particularly where air or water tends to stagnate.

Clean-up

Chlorine bleach is probably the most recommended chemical for the clean up of mold and mildew.

For interior surfaces — scrub with one cup of chlorine bleach to one gallon of water. Add a tablespoon of detergent for bathrooms. Work quickly since the corrosive nature of chlorine bleach could damage the surface. Be sure to rinse soon after scrubbing.

**** Caution: Never mix chlorine bleach and ammonia. This mixture is extremely dangerous.**

A somewhat safer alternative is the use of Borax. Wherever possible leave some Borax

solution on the wall as a deterrent to mold.

For fabrics—*dry* quickly in full sun. Brush or shake mildew from fabric. Wash with bleach to eliminate stains. Any residual stains should be treated with lemon juice and salt and allowed to dry in the sun. Rinse thoroughly. Damage to fabric may require disposal.

For carpet and pad— dry quickly. Exposure to the sun is desirable. Vacuum thoroughly. Dispose of the vacuum bag.



- Note — Frequently the carpet and pad will need to be replaced.

References and Resources

How to Prevent Mold and Remove Mildew; United States Department of Agriculture, Home and Garden Bulletin No. 68, 1980.

Healthy Indoor Air for America's Homes; Bug, Mold, and Rot, Instructional Module.

Controlling mold Growth in the Home; Cooperative Extension Service Kansas State University, September 1995.

The Inside Story - A guide to indoor air quality, EPA 402-k-93-007, April 1995.

Recovery-4, Iowa State University Extension, August 1993.

Be sure to check out our web site at
www.extension.iastate.edu/polk