

Native Plants for YOUR FARM



Cliff White



**Grow
Native!
makes it
easy**

There's never been a better time to use Missouri's native plants to conserve and beautify your farm. The farm bill provides unprecedented incentives for conservation, and most programs give preference to native plants. This is because local-source natives do a superior job of conserving soil and water and providing wildlife habitat. Ask your Missouri Department of Conservation (MDC) representative or local USDA service center how to use Missouri's native plants to maximize your farm bill program benefits.

If you're not familiar with Missouri's hard-working and beautiful native plants, finding and planting them may be a challenge. Grow Native!, a joint education and marketing program of MDC and the Missouri Department of Agriculture (MDA), makes using native plants on your farm easy. Because native plants work hard for wildlife and conservation—and because Missouri-grown natives support our state's economy—MDC and MDA have a big stake in the success of your farm's native plantings.

This Grow Native! guide shows you how to use Missouri's native grasses, sedges, forbs, shrubs, vines and trees to improve conservation on your farm, year after year.

Visit our website at www.grownative.org to find qualified technical assistance, locate tested Missouri-source identified seed and plant stock, find the right equipment, and hire qualified installers and maintainers if you don't want to do the job yourself.

Inside

- Better summer grazing and hay
- Steps for establishing native plants on your farm
- Improve crops and provide critical nesting habitat
- Missouri Department of Agriculture helps you fill the gap in farm productivity and profits



Native plants improve pasture

“In early summer months, cattle will gain faster on new warm-season grass than almost any other grass.”

—Ken Lenox,
fifth generation cattle rancher
in south central Missouri,
Today's Farmer

Whether you're a livestock producer or just pasturing a few horses for weekend riding, come summer, you can use all the high-quality forage you can get. Especially if it's a drought year. Missouri's native warm-season grasses, such as big bluestem, eastern gama grass, Indian grass and little bluestem will give you exceptional forage long after your exotic cool-season grasses have gone to seed. They also handle flood and drought much better than their cool-season counterparts. Adding forbs such as sunflower and partridge pea creates a native prairie meadow and adds nutritional value to summer forage and winter hay.

Steps for establishing native pasture on your farm

Whether you're converting pastures to native warm-season grasses or putting in riparian buffers, you'll want to start with a good plan, qualified technical support and reliable Missouri native seeds and plant materials. Grow Native! recommends this establishment process:

Plan ahead

- Visit your MDC private land conservationist or USDA office to plan your project. Find your private land conservationist on our web site at www.grownative.org/farm.
- Call your Grow Native! seed and plant materials dealer. Grow Native! member wholesalers and retailers carry Missouri-source, tested pure live seed that helps ensure successful establishment of native pasture.

Prepare for planting

- It's likely you will have to kill and remove existing cover with a non-selective herbicide. Be prepared to spray twice—once in the fall and again in the spring. Consider burning the residue to expose bare ground.

Locate your equipment

- Call your private land conservationist, USDA service center or Grow Native! private contractor to find equipment that will handle native grass seed.

Hire a Grow Native! trained contractor

- Don't want to do it yourself? Visit www.grownative.org/farm to find a trained and experienced habitat helper to do the job for you.



Steve Clubine

Recommended pasture species

Grasses

- Big bluestem
- Canada or Virginia wild rye
- Eastern gama grass
- Indian grass
- Little bluestem
- Sideoats grama

Forbs

- Ashy sunflower
- Compass plant
- Foxglove beardtongue
- Gray-headed coneflower
- Illinois bundleflower
- Lanceleaf coreopsis
- Lead plant
- Maximilian sunflower
- Pale purple coneflower
- Partridge pea
- Pasture rose
- Purple blazing star
- Purple coneflower
- Rattlesnake master
- Round-headed bush clover
- Sensitive brier
- Showy tickclover
- Slender bush clover
- Tickseed coreopsis
- Wild white indigo
- White prairie clover

Bring back the bobwhite quail!

Remember waking up to the bobwhite quail call on your farm? Bring it back with the right mix of native species and several well-established quail covey headquarters. These are woody “shrub islands” that quail can use as loafing and safe areas. These areas of protection must be at least 30 feet wide and 1,500 square feet in total area. Follow your planting with a quail-friendly management regime to guarantee good habitat on your farm.

Throughout their lives, quail need a variety of cover and forage

- Diverse native-grass stands provide roosting and nesting cover.
- Native forbs and legumes provide brood-rearing cover and food.
- Native-shrub islands serve as escape cover and covey headquarters.

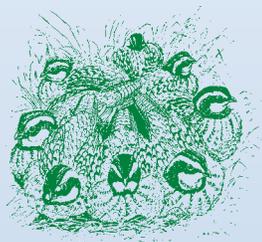
Without all these components, quail have a hard time surviving and reproducing. How you design your quail covey headquarters is not as important as including all the required cover types listed above.



Jim Rathert

Technical help for establishing successful quail habitat abounds. Consult your private land conservationist, your USDA service center representative, or Quail Unlimited representative for detailed information about burning, disking and mowing to maintain excellent quail habitat year after year.

Quail habitat needs change seasonally



Protection (January)

Native grasses, forbs & shrubs provide winter cover and food.



Pairing & bonding (February–April)



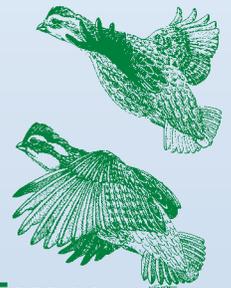
Nesting (April 15–September)

Diverse native grasses



Brooding (June–October)

Native forbs and legumes



Escape (October–April)

Native-shrub islands or quail covey headquarters

Artwork Courtesy of Virginia Department of Game and Inland Fisheries

Give chicks a chance—delay haying native grasses until July

Because 93 percent of Missouri’s lands are in private ownership, our state’s ground-nesting birds depend on you for critical nesting habitat. If you enjoy quail and other grassland birds, delay haying your native pastures until July. This gives chicks the chance to succeed. You’ll be rewarded in the fall with abundant bird hunting.

Free Guide

On the Edge: A Guide to Managing Land for Bobwhite Quail gives you full-color, step-by-step guidance for restoring quail to your farm. For a free copy, call (573) 522-4115, ext. 3630.



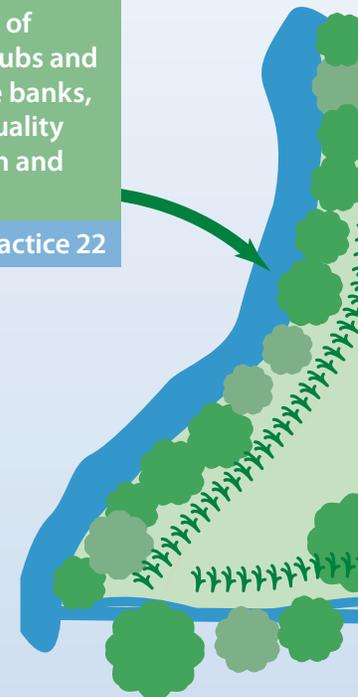
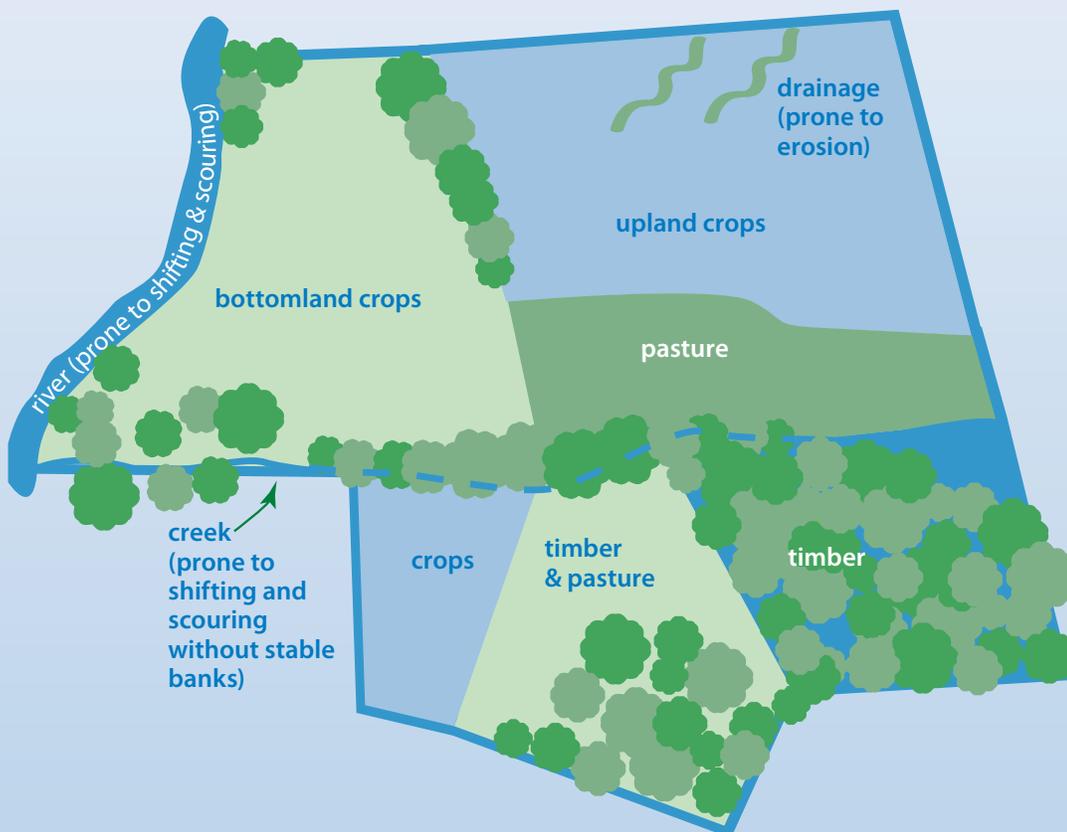
Natives maximize conservation benefits on your farm

Better adapted to Missouri's landscapes than commonly used exotics, Missouri native plants help conserve your farm's assets while maximizing economic returns. Research shows that field borders support beneficial insects necessary for pollination, and everyone knows the value of using filter strips and riparian buffers to stabilize soil and protect water quality. The farm bill emphasizes using native plants on your farm. In particular, the Continuous Conservation Reserve Program (CCRP) offers landowners with cropland or marginal pastureland unique opportunities to establish permanent vegetative cover. Aside from CCRP and other farm bill programs, many state and non-government organizations such as Quail Unlimited provide financial incentives for using natives.

Riparian buffers

Riparian buffers of native trees, shrubs and grasses stabilize banks, protect water quality and improve fish and wildlife habitat.

Conservation practice 22



Filter strips

Filter strips of native warm-season grasses catch nutrient and chemical runoff before it reaches streams.

Conservation practice 21

Typical Missouri farm without native-plant improvements. Illustration at right shows the many ways you can use natives on your farm. All practices are eligible for CCRP cost share. Conservation practices 8, 15, 21 and 22 are eligible for increased financial incentives.

Field borders
Field borders of native warm-season grasses provide habitat for beneficial insects and wildlife.
Many program incentives

Native-shrub rows
Native-shrub rows provide windbreaks, wildlife habitat and privacy screens.
Many program incentives

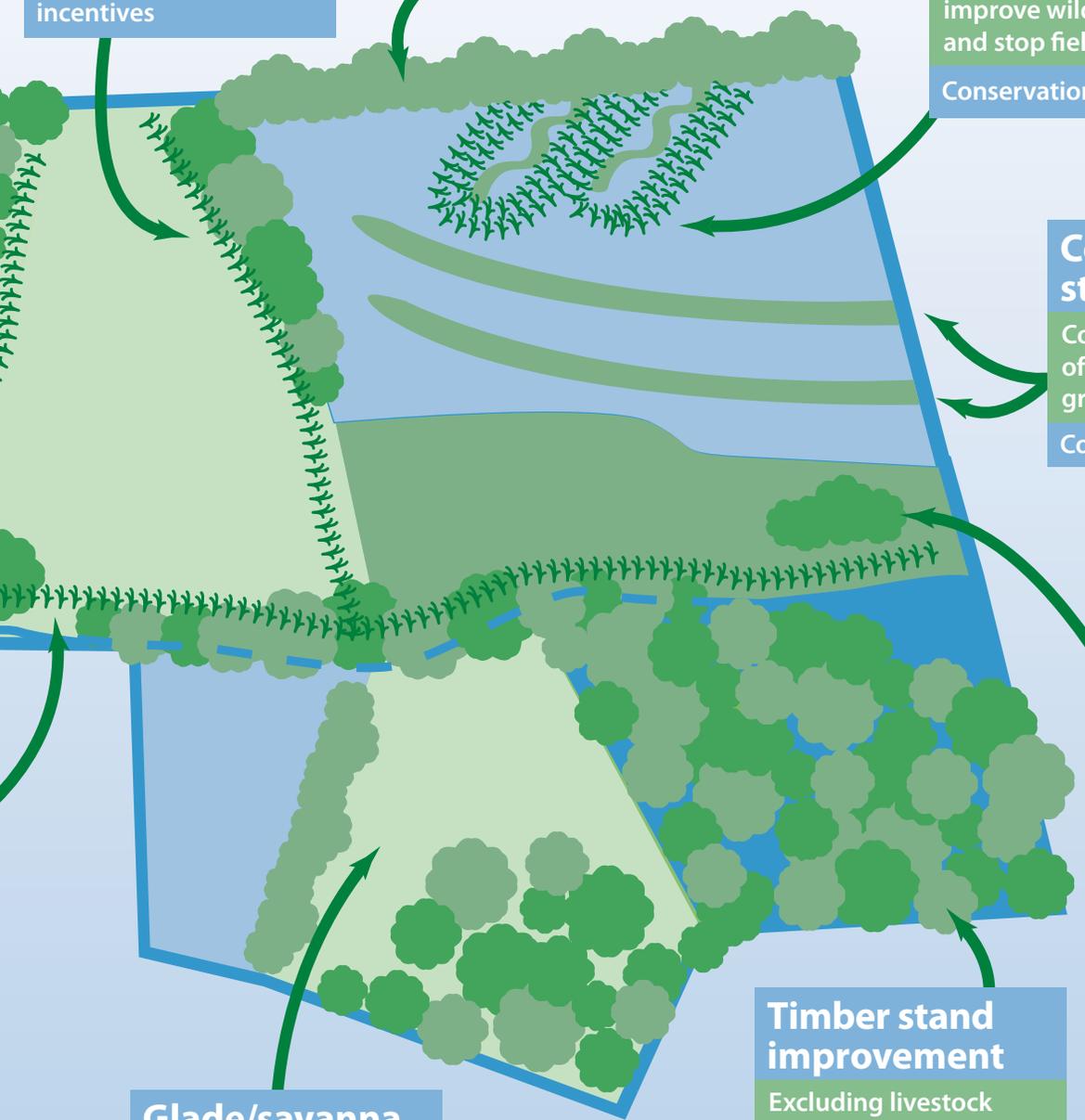
Grass waterways
Native warm-season grass waterways improve wildlife habitat and stop field gullyng.
Conservation practice 8

Contour buffer strips
Contour buffer strips of native warm-season grass stabilize soil.
Conservation practice 15

Native-shrub islands
Native-shrub islands provide quail covey headquarters, and native perennials provide high-quality food for wildlife.
Many program incentives

Timber stand improvement
Excluding livestock improves timber and provides wildlife habitat.
Many program incentives

Glade/savanna
Glade/savanna restoration provides wildlife habitat.
Environmental Quality Incentives Program, Wildlife Habitat Incentives Program



MDA helps you fill the profit gap



Arlene Allmon

Eye-catching marketing materials help Grow Native! members promote their native-plant products and services and encourage consumers to “buy Missouri first.”

From wineries to row crops and fruit orchards to livestock, Missouri’s agriculture is diverse and rich. If you live on one of Missouri’s 105,000 farms, you are especially aware of the importance of good land management to improve productivity and to care for the land entrusted to you. Today’s farmers are looking for new ways to improve their bottom line while conserving their land. Native grasses and wildflowers could be an answer to filling a gap in your farm or ranch productivity and profits.

The Missouri Department of Agriculture has many programs and services, including domestic and international marketing

assistance, to steer producers in the right direction. Here are a few that are of interest, if you want to use native plants as a product or as a tool, including examples of how native plant materials could play a role in your management and productivity goals.

Grow Native! marketing, business development and membership services help native-plant landscapers and retailers learn how to use and market native-plant materials. The program seeks to increase the demand for and the use of native plants, to build the Grow Native! brand, and to explore new native-plant marketing opportunities.

Examples: Marketing materials such as plant tags, point-of-purchase displays, quarterly e-newsletters, professional training and networking events and customer referrals are provided through Grow Native! member association and at www.grownative.org.

AgriMissouri Program helps develop niche markets for small farmers, including opportunities to market, promote and add value to their products.

Examples: Market specialty native crops such as pecans, wildflower honey or soaps made with plant extracts.

Beginning Farmer Loan Program helps beginning Missouri farmers acquire agricultural equipment, buildings, land or livestock at reduced interest rates.

Examples: Special planting or cleaning equipment

Alternative loan program can finance the production, processing and marketing needs of an alternative enterprise.

Examples: nursery stock, seeds, equipment, supplies

Financial programs provide grants for marketing, business planning and operational consulting for projects that add value to raw agricultural products and improve the economy of rural Missouri communities.

Examples: Develop area cooperatives, find or market native hay for primary or secondary uses, or develop wild birdseed mixes that include native seeds.

Marketing cooperatives can be a way for small farmers to gain economic strength by pooling resources, marketing and buying in larger quantities, and increasing their bargaining power. MDA provides assistance to small farmers by answering their questions about how to form a cooperative, alliance or other collective activity. Tax credits could be available to producer members of qualifying cooperatives.

Example: Area cooperative for cleaning, packaging, storing and shipping native seed

For more ideas about working with native plants to improve your farm or ranch profitability and management, check with Missouri Department of Agriculture, your local University of Missouri extension office, USDA Farm Service Agency, www.grownative.org “Farm Opportunities” or www.mda.mo.gov.

Learn the facts about native plants

Myth: "Natives are hard to establish."

Fact: Natives are "different" to establish.

Some native plants require different knowledge, skills and equipment than non-natives do. Your private land conservationists, USDA service center representatives and Grow Native! wholesalers, retailers and service providers are experts on native-plant establishment. They can help ensure the success of your planting.

Myth: "Natives are more expensive than exotic cool-season species."

Fact: Natives pay for themselves.

Native species cost more up front, but they'll pay for themselves over the long run. Better adapted to Missouri's soils and climate than exotic cool-season species, deep-rooted natives are drought- and flood-tolerant, require fewer inputs and provide high-quality summer forage.

Myth: "Specialized equipment for planting and harvesting natives is hard to find."

Fact: Grow Native! resources help you find the right equipment.

If you need a special planting or harvesting implement, check with your private land conservationist, local USDA service center or a Grow Native! member landscape service provider.

Myth: "Natives look weedy."

Fact: Correctly installed and maintained, natives look great.

There's a reason exotic cool-season pastures look so neat: they're a monoculture, just like a corn or soybean field. A diverse planting of native grasses and forbs may look a little rough the first year or two. However, if you're patient with this "ugly duckling" stage of growth, you'll be rewarded with beautiful pastures and habitat areas.

Myth: "Any grass cover will produce adequate wildlife habitat and stabilize soil."

Fact: Natives are best for wildlife and conservation.

Wildlife need variety and soil needs stability to function best. Clumpy, diverse, deep-rooted native plants stand up to drought and flood, while giving wildlife the open ground, structural variety and food they need.

Myth: "Natives are hard to find."

Fact: Grow Native! makes it easy to find Missouri native species.

Native seeds and plants aren't as widely available as non-native plant material, but many Missouri vendors sell locally grown native seed. The Grow Native! program exists to help you find high-quality native seeds and stock.

| Invasive non-native | Beneficial native | Invasive non-native | Beneficial native |
|--|---|--|---|
|  |  |  |  |
| Musk thistle | Sensitive brier | Sericea lespedeza | Round-headed bush clover |

What's native and why it matters

- The current mix of native plants has been here since the last Ice Age, about 10,000 years.
- Natives evolved with Missouri's geology, climate and wildlife.
- Many wildlife species prefer natives for habitat and depend on them for survival.
- Well-established and maintained native-plant communities can help resist invasive non-natives that threaten crops and habitat.
- Natives help us preserve our natural diversity, the rich foundation of Missouri's quality of life.

Jim Rather photos

Helping conservation come alive

Don't let unfamiliarity with Missouri's native plants keep you from putting them to work on your farm. Your private land conservationist is trained to help you plan and install successful conservation projects on your land. This free service is available to all Missourians. Find your private land conservationist at www.missouriconservation.org or www.grownative.org/farm or call (573) 522-4115, ext. 3237.



Use the website to learn more

The Grow Native! website includes a page designed especially for farmers and ranchers. The address is simple—www.grownative.org/farm. This Grow Native! page steers you to answers for questions such as “which farm conservation programs are right for my situation” and “which native species do these programs favor.” For instance, you’ll find information about the Grassland Reserve Program that provides up to 90 percent cost share and annual payments for easements or restorations of grassland. Plus, you’ll find an extensive list of recommended pasture species, including both grasses and forbs (prairie wildflowers), that puts you on the road to selecting the plants that satisfy program requirements.

If you need personalized help in planning native-plant use, look at the “help and equipment” section and click on it to find the name and phone number of your MDC private land conservationist or to locate your farm service agent. These agencies will point you in the right direction, whether you’re thinking about increasing your farm conservation efforts or planning to enter a program for the first time.

Once your plan is in place, the web page will guide you to Grow Native! members that produce and provide seed for recommended warm-season grasses and native forbs. In addition, you’ll find contact numbers for service providers who specialize in fulfilling farm conservation contracts.

Buy Missouri first . . . it’s a boost for local economies and the environment!

As you purchase seed, remember that source is important. Seed from native Missouri plants do better in Missouri than seed from varieties that grow best in other states. Seed from distant growers may be cheaper up front, but is less likely to survive and thrive in the long run. Check with Grow Native! members for seed adapted to Missouri’s climate and soils. They’re listed at www.grownative.org/farm.

Grow Native! is sponsored jointly by the Missouri Department of Conservation and the Missouri Department of Agriculture. Educational information and programs for the general public are supplied by MDC, while MDA works with marketing and business development for the native plant materials industry.

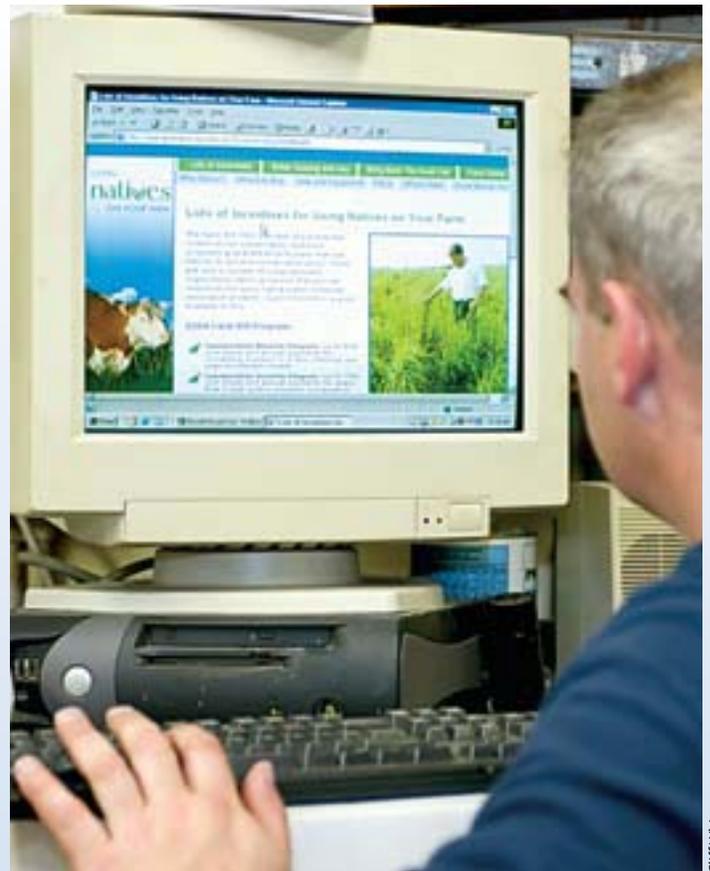
For general information, contact:

Grow Native!
Missouri Department of Conservation
P.O. Box 180
Jefferson City, MO 65102
(573) 522-4115, ext. 3833



For business development, contact:

Grow Native!
Missouri Department of Agriculture
P.O. Box 630
Jefferson City, MO 65102
(573) 522-4170



Cliff White

Find farm programs, guidelines and Grow Native! vendors at www.grownative.org/farm.



Missouri Department of Conservation
Missouri Department of Agriculture

Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, national origin, sex, age or disability. Questions should be directed to the Department of Conservation, P.O. Box 180, Jefferson City, MO 65102, (573) 751-4115 (voice) or 800-735-2966 (TTY), or to the U.S. Fish and Wildlife Service Division of Federal Assistance, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203.

Copyright © 2004, 2006 by the Conservation Commission of the State of Missouri 11/2006 E00564