



By Matt Hiebert

Seeding Opportunity

Purple Coneflowers

MoDOT preserves Missouri's natural heritage and helps an industry grow

Missouri roadsides are surrounded with opportunity. Opportunity to beautify, to profit and to recapture something almost lost.



Coreopsis blooms in a dazzling roadside display.

Two hundred years ago, an expanse of aster, bluestem, blazing star and prairie grass shimmered across the northwest Missouri plains. Virgin forests of river birch, dogwood and hawthorn canopied the rolling Ozark highlands. Purple coneflowers, black-eyed Susans and rose verbena bloomed across the countryside.

But things change.

As settler populations grew, the landscape was transformed. Families needed food, so farmers carved rows of corn, wheat and soybeans into the wilderness. Cities swelled along the banks of the Mississippi and Missouri rivers, sending arteries of roadways deeper into state boundaries, allowing rural towns to flourish. Over the years, suburbs adorned with imported hedges and chemically enhanced lawns annexed larger portions of the countryside. Economically beneficial exotics (plants from other regions) like fescue also gained ground.

Bit by bit, the land conformed to the aesthetic and practical needs of civilization. Today the lush vegetation that once thrived across Missouri has almost been lost.

Almost, but not quite.

Grow Native!, a Missouri Department of Conservation program that encourages the use of native flora, recently has teamed up with the Missouri Department of Transportation and other state agencies to return native vegetation to its rightful place along state roadsides and public lands.

Other organizations supporting the two-year-old program include the Missouri Department of Agriculture, Natural Resource Conservation Service, Missouri Conservation Heritage Foundation, Missouri Grassland Coalition, Missouri Botanical Garden, Nature Conservancy, Missouri Ecotype Project and the University of Missouri-Columbia.

Stacy Armstrong, MoDOT roadside management supervisor, says that using native plants is not new to the department.

“MoDOT has been using native grasses and wildflowers on its roadsides for years,”

Missouri Primrose



she says. “But Grow Native! is helping us strengthen and expand the program.”

The department officially “went native” last April when the Missouri Highways and Transportation Commission allotted \$1 million in enhancement funds for the program. Enhancement funds are federal monies that must be used for enhancements beyond normal transportation improvements, meaning they can’t go to maintenance and construction.

Steve Young, private-land services chief for the conservation department, says Missouri



Daisy



Butterfly Milkweed



Sweet William

Young says Grow Native! can help stabilize the state’s ecological balance and may prevent such an onslaught from happening here.

Why Native?

Benefits of native planting are numerous. First, these plants provide an opportunity to beautify roadsides naturally with little follow-up work.

Use the word “native” to refer to a plant and many people instantly think of weeds. In some cases they may be right, but with 2,500 native plants on the palette, that list of so-called weeds includes flowers like coreopsis, black-eyed Susans, purple coneflowers and others, all of which can add vibrant colors to Missouri roadsides.

Another misconception Young wants to refute is the idea that planted areas will be unkempt fields.

“These areas aren’t going to look abandoned,” he says. “We’re carefully planting the right species at the right height. It’s not going to look like our mowing tractors just ran out of gas. We’re not trying to turn our highways into nature trails.”



Purple beard-tongue brightens a Missouri right of way.

vegetation already has suffered from the introduction of exotic plants.

“The decline is serious,” he says. “We’ve probably lost 90 percent of our native-plant communities. Exotics like fescue and smooth brome become so rank they choke out everything else.”

In its extreme, a similar invasion can be seen along the roadsides of many southern states. Kudzu, an exotic plant originally introduced to America in 1876 as an ornamental vine, has spread across these warmer states, turning trees, telephone poles and fencerows into leaf covered sculptures.

“One of conservation department’s goals is to increase the diversity of Missouri vegetation to help restore native-plant communities,” he explains. “We saw Grow Native! as an avenue to do this.”

MoDOT agrees and is taking steps to make it happen. Armstrong says the department has targeted about 775 acres of roadside for initial plantings.

“We’re hoping to begin land preparation this fall in areas that don’t have the best vegetation to start with,” she says.



Spiderwort

PHOTOS AT TOP AND BOTTOM BY JIM RATHER; MIDDLE BY CATHY MORRISON

But beautification is only one aspect of the program. Perhaps the most tangible opportunity offered by Grow Native! has to do with the relationship between the environment and economics.

These plant communities have been thriving here for centuries. They adapt to Missouri's climate, resist local pests better than exotics, and attract desirable wildlife like butterflies and songbirds. In short, they belong here. That means less work maintaining roadsides for MoDOT.

"Since Mother Nature put them here to start with, they're better adapted to Missouri's climate than plants from another region," Armstrong says. "After they're established, we won't need to mow, water and fertilize as much to keep them alive."

And, that means they're cheaper to maintain. Plants that are brought in from other areas for aesthetic reasons often require more care than natives. When you're a state agency responsible for the mowing and upkeep of roadside vegetation, less work means more savings. This point carries a lot of weight with Judy Allmon, executive director of Grow Native!

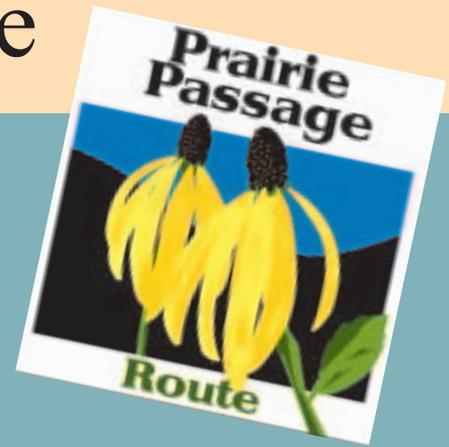
"I think the bottom line for many people is money," she says. "When you explain to Missouri taxpayers how much they'll be saving on fertilizers, pesticide and mowing over a 10- or 20-year period, they start to see the many advantages of the concept. Nobody can argue with money."

Armstrong says urban areas especially will benefit from low-maintenance roadside vegetation. Although exact figures on savings are still pending, simple mathematics support her claim.

"We'll see the real savings in more urban areas that are currently mowed frequently," she says. "In time, mowing in areas like interchanges could be cut from six times a year to maybe one or two times a year."

Prairie Passage

States are making beautiful roadsides together



The programs may be different, but their goals are the same.

Although Prairie Passage is funded and operated separately from Grow Native!, both projects strive to return native vegetation to Missouri roadsides. That common goal has inspired the Missouri Department of Transportation to bring the programs closer together.

"We're tying the two projects together to make better use of our resources," explains Danny Woods, MoDOT roadside management specialist. "They obviously mesh very well."

Prairie Passage is a cooperative effort that helps Missouri, Minnesota, Iowa, Kansas, Oklahoma and Texas to preserve our natural heritage by planting native wildflowers and grasses along a north-south corridor from Canada to Mexico. It involves a number of agencies from each state, including departments of Conservation, Tourism, Transportation, Natural Resources and Nature Conservancies. Initial funding for Prairie Passage came from the Federal Highway Administration in 1994.

Woods says that by cooperating with Grow Native!, a Missouri Department of Conservation program that encourages the planting of native vegetation, the Prairie Passage goal will be realized more easily.

Participating states are cooperating on signage, promotion and route designation. The effort also gives states a chance to tell people about the history of the plains.

"We want to protect existing remnants of the wildflowers and grasses that grew across these areas," says Stacy Armstrong, MoDOT roadside management supervisor. "But we also want to educate people about their prairie heritage."

Targeting a corridor along the western Missouri border around Interstate 35 and Route 71, MoDOT surveyed the condition and variety of the native plant community. The data was cataloged and will be used to develop the Prairie Passage program, Armstrong says.

The Prairie Passage project is set to take off. Land preparation on several sites is scheduled to begin this fall, thanks to MoDOT transportation enhancement funds, federal dollars that must be spent on improvements other than construction and maintenance.

"Our next step is to start working with the MoDOT districts to make it happen," Woods says.

Seeds of a Growing Industry

Financial opportunity for Missourians doesn't end with savings on mowing and maintenance. In fact, that's just the beginning. The real financial benefit trickles down to those who will supply the seeds and plants for the Grow Native! effort.

"This program provides two benefits we consider important," says Henry Hungerbeeler, MoDOT director. "First, it has the potential to achieve significant savings for the department because native plantings will not have to be mowed as often. Second, our participation can help stimulate and support Missouri's native-plant industry."

Currently, Grow Native! is working to strike a balance between supply and demand by stimulating new markets and working with new and existing seed suppliers. With 385,000 acres of roadside under its care, MoDOT has certainly inspired demand. Now the organizers of Grow Native! are focusing on the supply side.

Allmon says that expanding the list of nurseries that sell native plants and seeds is one goal of the program. Currently, about 50 nurseries participate in Grow Native!

"Instead of the government agencies having to do everything from harvesting the seeds to planting the plants, we're getting nurseries and native-plant material growers involved," Allmon explains. "We teach them that there is a market for native plants that will make them money and make a difference for conservation."

But the native niche is not confined to public lands. Allmon says that we are all potential supporters of the Grow Native! program.



Sweet Coneflower

"Only 8 percent of Missouri land is owned by the government. The other 92 percent is owned by private citizens," Allmon explains. "If you have a home and choose to use plants that require a lot of pesticides, fertilizers and water, you're making a land-management decision. Anyone can participate in Grow Native!"

Not only does this expand the support base for native Missouri plants, it potentially fattens the retail market. The buying public just has to learn about the program.

"Public education is the biggest challenge we have," says Amy Hamilton, co-owner of

Taking Root

The future of Grow Native! will focus on education and expansion. Little by little, the public will begin to see the results of the program across Missouri public land. More nurseries, co-ops and seed suppliers will catch on and join up. Roadsides will bloom in spring. Revenue will be generated.

In time, these markets will expand regionally throughout the Midwest, encouraging the growth of alternative agriculture markets like pharmaceuticals, foods and livestock forage.



Travelers enjoy a colorful show of purple and yellow coneflowers and Queen Anne's Lace.

Hamilton Seed in Elk Creek, near Cabool in south central Missouri. "The customer has to be hit with the Grow Native! message several times before he gets it."

Hamilton has figured out one way to educate local plant enthusiasts. Three times a year, she hosts an event called "Prairie Days" where she invites the public to come learn about native plants. The sessions begin with discussion of the Grow Native! concept and end with a follow-up slide show.

"We show them slides of different wildflowers in bloom, so they can see that this isn't the same old petunia bed," Hamilton says.

And hopefully, native plants will flourish along our highways. After all, these plants are far more than pretty flowers.

"They're our heritage," Armstrong explains. "They're one of the things that makes Missouri, Missouri." ■

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