

MISSOURI NEWS SCENE

Planting seeds of profit

By BARBARA FAIRCHILD

WHEN USDA introduced the Conservation Reserve Program two decades ago, it created an immediate need for seeds of the warm-season grasses that once covered Missouri. Landowners interested in turning crop production acres into conservation plots soon discovered that finding seed native to Missouri was next to impossible. Instead, they had to outsource seed from areas as far away as Texas.

That's not the case today, thanks to a handful of dedicated native plant seed producers and collectors. Here is the story of three Missouri farms that bring native plant seed to the market.

Large-scale source

Rex and Amy Hamilton operate Hamilton Native Outpost in the Missouri Ozarks near Elk Creek. They happened into their business through the back door. "We both worked for the Soil Conservation Service and raised cattle on the side," Amy says. "Early on, we learned there are weight-gain benefits when cattle graze warm-season grasses, so we started harvesting seed to plant on our farm."

Today, they are one of the largest suppliers of native seed in the state. The Hamilton operation includes 200 acres of forbs, or wildflowers, and 200 acres of warm-season grasses, as well as cattle and goats.

In the past, fire was important to creating healthy prairies and suppressing brush. It remains a key management tool today. Including livestock in their operation, however, lets the Hamiltons get by with fewer and less intense fires.

"Fire is important to native seed production, but too much is hard on the soil," Amy says. The Hamiltons plant warm-season grasses in small paddocks to facilitate rotational

Key Points

- State farms grow native plant seed for conservation plots.
- Boost in Missouri's grass seed supply keeps prices in check.
- Native grasses, forbs come with a few management challenges.



FIELD ABLAZE: Prairie blazing star is irrigated at Frank and Judy Oberle's farm near Novinger. The Oberles harvest native forbs and grass seed for their Pure Air Native Seed Co.

grazing by their cattle. Forb plots are even smaller — typically 3 to 4 acres — and are grazed by their goats.

There are no textbooks on native plant seed production, but prairie remnants serve as a teacher, Amy says. "Visiting prairies has allowed me to understand how the plants work."

The Hamilton crews also travel to native prairies and Missouri Department of Conservation public lands to harvest seed.

Enterprising producers

Up north near Albany, Betty Grace makes notes on her calendar to remind her it's time to check the maturity of native plant seed. She and her husband, Jim, are the proprietors of Grace Native Seed. They

planted their first warm-season grass plots 10 years ago. Like the Hamiltons, the Graces divide their 180 acres of seed production into 10- to 20-acre paddocks that dovetail into a custom grazing enterprise.

They concentrate on warm-season grasses, including little bluestem, big bluestem, Indian grass and eastern gamagrass, plus a cool-season Virginia wild rye. They also have small plots of prairie coreopsis, pale purple coneflower and butterfly milkweed. In addition, they harvest seed from wild patches of American germander, round-head lespedeza, foxglove beard-tongue and rattlesnake master.

Each phase of their operation has unique management challenges. For the grasses, it is finding the perfect time to graze cattle in the summer to maximize weight gain — without limiting their ability to harvest seed. Jim's choice is to harvest seed from his stand of eastern gamagrass in late July and bale it for hay before he moves in cattle to graze it at least once, perhaps twice.

Purely seeds

On Frank and Judy Oberle's 500-acre farm near Novinger, they rely strictly on herbicides, hand weeding and fire to keep production fields weed free. They launched their Pure Air Native Seed Co. in 1993. The farm includes 75 acres of forbs and legumes and 425 acres of grasses, with an inventory of more than 70 native plant species. In addition, the Oberles harvest native plant seed from surrounding farms.

While forbs cover only a small portion of production acres, they take 90% of Frank's time. "Forbs are labor intensive; many species can't be harvested mechanically, so there is a lot of hand labor. That's what



SEED BOUNTY: This stand of eastern gamagrass was harvested for seed in late July on Jim and Betty Grace's farm near Albany. The Graces are among a handful of native plant seed grower-collectors in the state.



FAMILY CREW: Among the native plant species grown by Rex and Amy Hamilton (left) is this vividly yellow rosinweed. Their children, Colt and Elizabeth, are part of the seed production crew.

makes the seed so expensive," he explains.

Vital role

While these native seed producers differ in size and scope, they share a common belief: Native plants should play a bigger role in landscapes.

"Native plants are adapted. They competed and flourished in Midwest climate and soils long before white men arrived. Once established, native plants require few inputs and are low maintenance," Amy Hamilton notes.

"We want to help others play

a role in improving wildlife habitat," says Jim Grace. The CP25 fields on his farm are a textbook example of what can be done. Fourteen species of grasses and forbs are included in the CP25 planting — a number that ensures a biodiversity that attracts a broad range of beneficial insects and other wildlife, including the bobwhite quail.

Frank Oberle describes the perk of his job as doing something that is rare. "By producing native grass seed, I can help save declining ecosystems."

Fairchild is the Grow Native! communications specialist.

Obstacles of native plant seed production

IT'S no surprise that weeds and weather top the list of challenges for native plant seed producers. Techniques used to control weeds include foraging goats and cattle, controlled fire, herbicides, and hoes.

For native plant seed production, August weather is crucial. "If it's too hot and dry, seeds don't fill and harvest is diminished," explains Amy Hamilton of Hamilton Native Outpost, Elk Creek.

Timing harvest for top yields is another challenge. For many forb species, such as asters, goldenrods and sunflowers, each flower includes a head of

many florets — each of which produces a seed. The tiny florets typically open from outside to inside, so seeds on the outside are ready before ones in the middle, making it difficult to judge the optimum time to harvest.

Harvest of spring-blooming species begins as early as May, while the harvest of other species extends through November.

"Species harvested in the spring may need checking only once a week or so," Hamilton says. "By July, plots need to be checked two or three times, and by August, harvesting is weekly with several crews on call. Things start to slow down in October."

A combine or seed stripper is used to harvest grass seed. While most forbs can be mechanically harvested, some must be hand-harvested.

Lack of patience is an obstacle for novice native plant seed producers, say the veterans. "It takes a good five years to produce your first crop," says Frank Oberle of Pure Air Native Seed Co. "You work two years to get rid of weeds, the third year you plant, and two years later you're ready to harvest."

As plots age, they become less productive, so establishing new plots is ongoing.

Grow Native! session offered

TO learn more about native plant seed production, attend the Nov. 19 Grow Native! meeting at the Runge Center in Jefferson City. This annual meeting brings together an assortment of businesses involved in the native plant industry and provides a variety of educational sessions.

To register for the meeting or for more information, call Tammy Bruckerhoff at 573-522-4170.

Locate a seed producer

TO locate a native plant seed producer near you, go to www.grownative.org and search for seed producers. For a list of Missouri Native Seed Association members, go to www.mo.nativeseed.org.

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