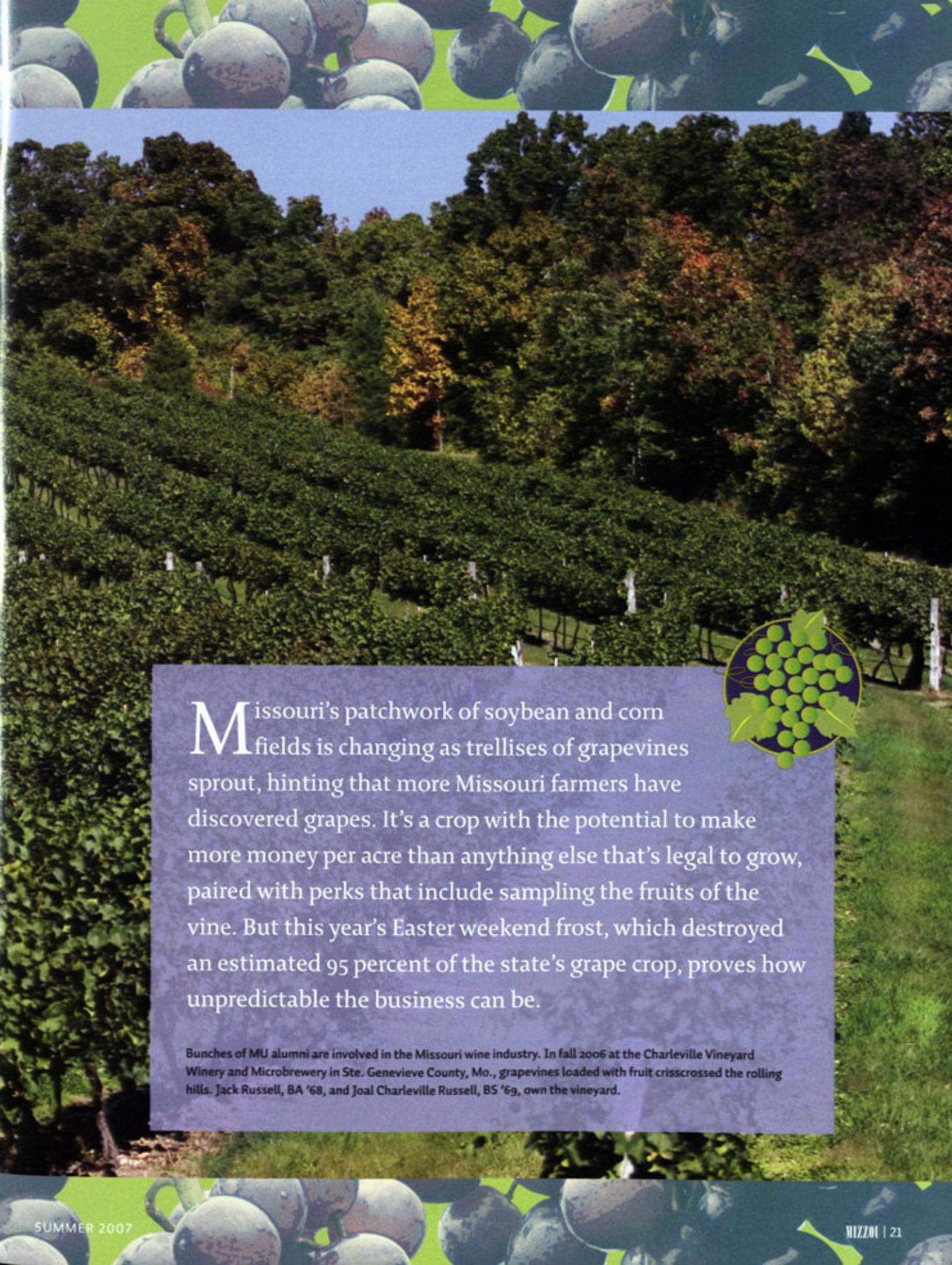


Grape expectations

Mizzou and Missouri are uncorking the wine industry's potential
Stories by Lisa Groshong. Photos by Nicholas Bernier



Missouri's patchwork of soybean and corn fields is changing as trellises of grapevines sprout, hinting that more Missouri farmers have discovered grapes. It's a crop with the potential to make more money per acre than anything else that's legal to grow, paired with perks that include sampling the fruits of the vine. But this year's Easter weekend frost, which destroyed an estimated 95 percent of the state's grape crop, proves how unpredictable the business can be.

Bunches of MU alumni are involved in the Missouri wine industry. In fall 2006 at the Charleville Vineyard Winery and Microbrewery in Ste. Genevieve County, Mo., grapevines loaded with fruit crisscrossed the rolling hills. Jack Russell, BA '68, and Joal Charleville Russell, BS '69, own the vineyard.

Within the basic steps of winemaking — growing, harvesting, crushing, fermenting and bottling — lie myriad variables and potential disasters. Beyond Missouri's famously capricious spring, Cory Bomgaars, A&S '94, the winemaker at Les Bourgeois in Rocheport, Mo., says countless decisions go into every vintage he creates. "You're thinking about the taste of the wine before you ever plant," he says. "The minute you pick the grape, you start making decisions about how to deal with it."

Even in years with good harvests, Les Bourgeois buys grapes from around the state, so Bomgaars, who studied enology at the University of California-Davis, must find the right percentages of different varieties to craft each year's vintages. The process requires months of tweaking and tasting. The April 4-9 deep freeze will force Bomgaars to use last year's inventory and buy from states whose grapes escaped the frost.

Bomgaars isn't the only Missourian pondering wine, says Jim Anderson, head of the wine and grape program for the Missouri Department of Agriculture. "A lot of people who call are thinking about getting into grape growing."

It costs \$5,000 to \$15,000 an acre to start a vineyard, Anderson says, with full production after three to five years. "So don't quit your day job," Anderson warns. "Most growers start small and grow as their market grows."

It's hard to blame farmers for looking at vines and seeing dollar signs. In 2005, national wine sales grew to a retail value of \$26 billion, according to the Wine Institute, a California-based group that advocates for the wine industry. The institute reports that the U.S. wine and grape industries contribute more than \$162 billion to the economy each year.



Left: The arm of the picking machine dumps grapes into a wagon pulled by Josh Pehle. Pehle works at Les Bourgeois Vineyards, owned by Curtis Bourgeois, Arts '87, in Rocheport, Mo. Right, wine ages in barrels in the cellar of Hermannhof Winery in Hermann, Mo.

Missouri was once a major player. Hermann, Mo., has long been a wine powerhouse. Herman Jaeger, a vintner from Neosho, Mo., developed the root stock that saved the French wine industry from a devastating scourge of root louse in the 1880s. A monument at the École Nationale Supérieure Agronomique in Montpellier, France, commemorates the event.

Unfortunately, Prohibition, from 1920 to 1933, destroyed Missouri's wine industry.

Since the 1960s, the industry has been bouncing back. Missouri has about 20,000 acres of wine grapes, and local winemakers are getting recognized on a national level. In 2005, *Wine Business Monthly* called Missouri's St. James Winery one of its five "hottest small brands." It was the only non-California winery named to that list in 2003, 2004 or 2005.

Jim Dierberg, BS '59, who owns three California vineyards and the Hermannhof Winery in Hermann, says Missouri's slow recovery after Prohibition gave California's industry a 40-year head start. But Missouri vintners are finding their way. "Missouri is finding the right grapes and the right way to grow," Dierberg says. "It's a work in progress."

Bomgaars concurs. His contacts in the Missouri industry suggest that about \$20 million in new winery construction is under way. When he joined Les Bourgeois 15 years ago, the company produced about 15,000 gallons of wine a year. Now, it's around 100,000 gallons — enough for 450,000 bottles.

Bomgaars is on the board of the Institute

for Continental Climate Viticulture and Enology (ICCVE), established at MU in fall 2006. The "continental climate" of the institute's name refers to the weather conditions shared by Midwestern states, unlike the Mediterranean-type weather found in California.

Like Eastern Europe, Missouri's main challenge is weather that swings from cold winters and late spring frosts to broiling, humid summers and from drought to flood, Bomgaars says. Growers must plant cold-hardy, disease-resistant varieties that can tough out the extremes. And winemakers must prepare for the occasional disaster. "You can't cry over frozen grapes," says Bomgaars, who hopes the 2007 fallow year will let his vines grow stronger. "Maybe next year we'll have a bumper crop."

While it can't do much about the weather, the ICCVE hopes to improve Vignoles grapes, which are prone to rotting because of their tightly packed clusters. One remedy may be to use a brush to sweep the flowering plants so that they produce less fruit.

Other projects include manipulating the woody canopy of Norton grapes to put on more fruit and harnessing information provided from weather stations to forecast infection periods and reduce pesticide use.

One early spring morning found Bomgaars deep into sensory trials before bottling. His afternoon called for tasting eight wines — another day at the office in one of Missouri's most alluring industries.



Tempting topics on tap

Institute launches winemaking research at MU.

Mizzou students' independent study on wine will shift from apartments to classrooms and laboratories this fall, thanks to the Institute for Continental Climate Viticulture and Enology (ICCVE), established at MU in fall 2006.

Dedicated to growing grapes and making wine, the institute is part of MU's Division of Food Systems and Bioengineering (FSB) in the College of Agriculture, Food and Natural Resources. Most of the institute's \$800,000 budget comes from the Missouri Wine and Grape Board, which manages funds from a 12-cents-per-gallon state tax on wine sales.

Along with educating growers across the region about the latest developments in viticulture, the ICCVE will teach graduate and undergraduate students how to grow

grapes in the Midwest's capricious climate, whose extremes in temperature can destroy traditional European grape varieties.

FSB Director Jinglu Tan says labor shortages and Missouri's weather challenges make it important for the state to conduct research and training to aid an industry that contributes millions of dollars to the state's economy.

By fall 2008, ICCVE Director Keith Striegler says classes should be in place for undergraduates to major in plant sciences with an emphasis in viticulture or food sciences emphasizing enology.

Students will learn how to make wine in an experimental winery Tan hopes to have running by spring 2008. Joining more than 90 existing wineries in the state, the operation will provide students experience in a teaching and research lab modeled

after Buck's Ice Cream Place. Space is designated for the winery in the Ag Engineering building. "We need to come up with a name," Tan says. "Maybe Tiger something."

On the viticulture side, the institute has established experimental vineyards in southern Missouri, and plans call for test plots closer to Columbia, possibly at MU's South Farm at 3600 E. New Haven Road. The institute also partners with local commercial vineyards to study established plants.

As for enology, Missouri Senate Bill 725, passed in 2006, gives students permission to sample the products of their labor. The legislation allows supervised culinary students 18 and older to taste beer, wine and other beverages as part of culinary courses. They're supposed to sniff, swirl and sip — then spit.





Missouri wine recommendations

Missouri winemakers use a variety of blends to produce their award-winning wines, though they lean heavily on the state's two trademark grapes to produce some of its most distinctive and celebrated wines.

Norton, also known as Cynthiana, became Missouri's official state grape in 2003. Norton is an adaptable and self-pollinating red grape that has been cultivated since the 1830s. Norton grapes produce full-bodied and deeply colored wines with earth tones and berry and spice flavors. Missouri vintners appreciate Norton's hardiness and adaptability.

Missouri's star white varietal is Vignoles. Vignoles is a French-American grape high in sugar and acid that can be used to produce everything from dry whites to sweet dessert wines.

Glenn Bardgett, wine director of Annie Gunn's restaurant in Chesterfield, Mo., recommends the following:

- Adam Puchta Winery's Traminette, a gold medalist in the 2006 Missouri Wine Competition
- Les Bourgeois Vineyards' Solay dry white
- Augusta Winery's 2004 Vignoles, winner of the 2006 Governor's Cup
- Stone Hill Winery's Vignoles, which won "Best of Class" at the 2006 Missouri State Fair

Doug Frost, a master sommelier and master of wine in Kansas City, Mo., says every winery on his list produces a good Norton, particularly the Adam Puchta Winery. Some other delicious vintages include:

- Les Bourgeois' Chardonnay (reserve bottling), which Frost calls "one of the best in the state, along with Crown Valley Vineyards and Stone Hill"
- Stone Hill Winery's Late Harvest Vignoles, plus the dry Vignoles from the Stone Hill, Augusta and Mount Pleasant wineries
- Augusta Winery's "first-rate" Seyval Blanc
- Montelle Winery's Chambourcin
- Adam Puchta Winery's Traminette

Opposite page, clockwise from top left:

Norton grapes produce some of Missouri's most distinctive wines. Drew Lemberger, A&S '91, cellar master at Les Bourgeois Vineyards in Rocheport, Mo., finishes bottling the 2006 St. Vincent Dry Rosé, one of the winery's limited edition vintages. Lemberger wheels a wagonload of grapes to be crushed. Derek Edgell, left, and Frank Gordon sort leaves and sticks from grapes as they roll off a mechanical harvester. This page, right: Lemberger looks into a crusher and de-stemmer. The machine separates the fruit from the stems.

Homegrown vintners

Several MU alumni are principals in Missouri wineries. They include:

Charleville Vineyard

Ste. Genevieve, Mo.

Jack Russell, BA '68

Joal Charleville Russell, BS '69

Claverach Winery

Eureka, Mo.

Gary Hilmer, BS PA '71

4-M Farms and Vineyards

St. James, Mo.

Donna Rippelmeyer, MSW '93

The late Marvin Rippelmeyer, BS '66

Hermannhof Vineyards

Hermann, Mo.

James Dierberg, BS '59

Les Bourgeois Vineyards

Rocheport, Mo.

Curtis Bourgeois, Arts '87

Sugar Creek Winery and Vineyards

Defiance, Mo.

Becky Graham Miller, BS Ed '63

Son Chris Lorch, BA '94



ONLY COLD WINE ONLY





Wineries attract tourism dollars

The "Sideways effect" following the 2004 hit film sparked an explosion in Santa Barbara, Calif., wine country tourism and turned Pinot Noir into a movie star. The Santa Barbara visitors bureau printed 40,000 maps tracing the main characters' wine-tasting route for swarming throngs of movie fans.

Nationwide, wineries get about 30 million visitors a year, accounting for roughly \$2 billion in tourist spending. MU faculty members are looking at ways to increase Missouri's share of those dollars.

Jim Dierberg wants some of the thirsty tourists to choose Hermann, Mo., a town he thinks can compete with California's top wine destinations.

"Hermann is the best-kept German settlement in the United States," he says. "But it should be better recognized. It's something that I would like to preserve."

Hermann has been a hub of Missouri's wine industry since members of the German Settlement Society founded the town in 1836 and began growing grapes on the hilly, rocky land. By 1869, half the wine produced in the U.S. came from Hermann.

Prohibition, which lasted from 1920 until 1933, crushed Missouri's wine industry. It wasn't until 1965 that Hermann's Stone Hill Winery reopened, generating a rebirth that turned Hermann into a reluctant party magnet.

Today, Dierberg, BS '59, is spearheading a family-friendly renaissance. Dierberg, whose brother Bob Dierberg, BS BA '61, owns the eponymous grocery chain, is chairman and retired CEO of First Bank. Like Hermann's founders, the Dierberg family

traces its roots to Germany.

Since opening the Hermannhof Winery in 1978, Jim Dierberg has used his entrepreneurial acumen to help Hermann become a tourist draw that evokes the old country without subjecting visitors to trans-Atlantic flights or slogs through airport security. Instead, Hermann's amenities lie 55 miles west of Dierberg's hometown of Creve Coeur, Mo., a suburb of St. Louis, making Hermann an affordable destination even if gas seems to cost more than Gewürztraminer.

Dierberg, who also owns three vineyards in Santa Barbara County, Calif., has spent millions restoring Hermann. He owns the city's Festhalle, which hosts holiday festivals and craft fairs. He has renovated dozens of upscale guest rooms and backed his daughter and a partner in turning a former MFA grain elevator into a restaurant and brewpub. He is renovating one of the town's oldest homes and is creating a 175-acre living-history farm that will produce artisan cheeses and allow visitors to experience 1800s life as Hermann's first German settlers did.

Recently, Dierberg gave \$200,000 to East Central College in neighboring Union, Mo., to set up a music and arts program. This summer the college launches a festival that takes place the weekend of June 8, featuring free jazz and classical music concerts and a juried art exhibit.

Efforts like Dierberg's could do much for tourism, the state's most lucrative renewable resource. In 2005, tourism brought to Missouri about 38.8 million people who spent roughly \$8 billion, according to a

report on the economic impact of the tourism industry by Michael Kaylen, associate professor of agricultural economics.

Missouri's wineries are a key factor in drawing tourism because of their cachet and romance, says Elizabeth Barham, assistant professor of rural sociology.

Barham believes the state has tourist draws beyond the big cities and Hermann. She directs the Missouri Regional Cuisines Project, which seeks to organize producers, retailers and agri-tourism venues on a wider regional basis. The project draws on her experience studying in France, where wine production is closely tied to the region where the grapes are grown and the food and culture that go with it.

Barham says regional wine tourism will continue to grow because it offers Midwesterners a way to stretch their travel dollars while indulging in a popular luxury product in a friendly setting. "I don't think it's just a trend," she says. "I think it reflects a sort of gathering shift in American food tastes."

An initial phase of Barham's project mapped a six-county area in the Mississippi River Hills of eastern Missouri, where Barham is encouraging collaboration among agri-tourism businesses and the government and University offices that assist them. The map shows 200 historic sites, B&Bs, U-pick farms, wineries and other attractions in Jefferson, Ste. Genevieve, St. Francois, Perry, Cape Girardeau and Scott counties. The goal: to help the entire state's tourism industry flourish as part of the University's land-grant mission.

"We have a lot of lovable places in Missouri," she says. "This project is a way to leverage getting people to work together to promote them." ■

To order a copy of the Mississippi River Hills map, go to: extension.missouri.edu/explore or call 800-292-0969. For more information about Hermann's Taste of the Arts Festival June 8–10, visit www.hermannmo.info.

Opposite page, clockwise from top left: An antique grape press stands guard at Charleville Vineyard in Ste. Genevieve, Mo. Missouri's German settlers brought winemaking experience and equipment from the old country. Myra Hollenberger of Sugar Creek Winery in Defiance, Mo., pours a sample of Cynthiana for Bill and Delores Hoffmann from O'Fallon, Mo. Jim Dierberg, BS '59, is turning these historic buildings into guesthouses in Hermann, Mo., as part of his plan to preserve Hermann's history. To learn more, Dierberg recommends reading Charles van Ravenswaay's *The Arts and Architecture of German Settlements in Missouri: A Survey of a Vanishing Culture* (University of Missouri Press, 1977). Cherie Vollmer and Rodney Washington of New Haven, Mo., enjoy fall scenery at Stone Hill Winery in Hermann, Mo.