Missouri auditor reviewing college presidents, chancellors

THE ASSOCIATED PRESS | Posted: Saturday, July 16, 2011 6:54 pm

SPRINGFIELD, Mo. • The Missouri auditor's office is completing a review of the contracts for the presidents and chancellors of the state's public universities.

Gary McElyea, a spokesman for Republican Auditor Tom Schweich, said the review was to focus on the retention and compensation practices for the top leaders at Missouri's public, four-year colleges and universities. He said the study was to be completed this summer but declined to comment about the specific details of the audit.

McElyea said the examination was started under Democratic Auditor Susan Montee, who Schweich defeated at the polls last year. The scope of the current review includes the leaders of individual campuses and the president of the four-campus University of Missouri system. The most recent review of university leaders was a follow-up from a state audit in 2000.

The Springfield News-Leader reported that another recent state review also included an examination of the president at Missouri State University. The audit raised questions about the university's contract with former president Mike Nietzel. That contract allowed Nietzel to become part of the faculty at the university in Springfield and go on paid leave for a semester with a salary of $160,000 per year. Nietzel taught a class in the spring and is to retire at the end of July. Auditors suggested that Nietzel's salary appeared excessive and said Missouri State University should offer justification for the paid leave and require people to return to the school for a specific amount of time after the leave.

A similar contract was agreed to with James Cofer, who succeeded Nietzel as the president of Missouri State University. Cofer left the school's presidency this summer after holding the position for less than a year and is to become part of the faculty. Cofer will earn a salary of $165,000 starting in August but was expected to start teaching until the fall 2012 semester.

The Missouri State University Board of Governors said in response to the previous audit's findings that the board had the authority to negotiate and approve contracts for the president. It said the terms of the contracts were common and appropriate.
ST. LOUIS POST-DISPATCH

Does anyone want to be chancellor anymore?

Several local universities need to fill top job as presidents, chancellors leave high-stress positions.

BY TIM BARKER tbarker@post-dispatch.com > 314-340-8350 | Posted: Monday, July 18, 2011 12:10 am

Someone needs to hang a bunch of "help wanted" signs outside the offices of a half dozen or so local university presidents and chancellors.

Following a spate of vacancies — brought on by illness, change of heart, scandal and retirement — several of the region's top schools find themselves searching for leaders just as higher education struggles through one of the worst economic periods in recent history.

Insiders and search consultants say there's no reason to think this area is suffering more than others in terms of leadership loss. But they also say no one should be surprised to see campus chiefs bowing out — even those relatively new to the job.

In the best of times, these are demanding posts, requiring enormous time commitments. But today's presidents and chancellors also find themselves trying to balance tight budgets, while facing the scrutiny of parents, students, faculty, alumni and politicians.

"You build up a lot of antagonism after a few years. It gets harder and harder to deal with it," said Michael Baer, a search consultant with Washington-based Isaacson, Miller. "It's a much more difficult position than it used to be."

It's difficult to say how many schools nationwide are searching for new presidents. But there are reasons to believe the number is growing.

When the American Council on Education last did its periodic survey of college presidents in 2006, it found that nearly half of them were at least 61 years old — compared with 14 percent in 1986 — suggesting many schools would soon be coping with retirements.

"At the national level, we've been anticipating more turnover than we've seen" in the past, said Peter Eckel, director of the council's Center for Effective Leadership in Washington.

The same conclusion can be drawn from a 2006 survey by the American Association of Community Colleges, which found that nearly a third of campus chiefs planned to retire between 2010 and 2012. That's not surprising to Myrtle Dorsey, the organization's chair and new chancellor at St. Louis Community College.
Dorsey, who's still unpacking boxes following her June arrival, said the days of campus leaders sticking around for 25 or 30 years are waning. "It's just a different time. And the jobs are very different than they were before," she said.

Retirement has certainly claimed its share of presidents in this region, including those at Harris-Stowe State University, the Missouri University of Science and Technology and St. Charles Community College. But that's not the only reason presidents are leaving. The University of Missouri system lost Gary Forsee earlier this year, when he resigned to spend time with his sick wife. The University of Illinois at Urbana-Champaign is still looking for a permanent replacement for a chancellor who left in the wake of a 2009 admissions scandal. And Missouri State University's president, James Cofer, lasted just one year before deciding in June to return to teaching.

Perhaps the most jarring departure was that of Forsee, a widely respected president whose business background — as a former chief executive at Sprint Nextel — made him an ideal fit for the state's flagship during this time of economic turmoil. "We lost a leader who could have repositioned the university for the long run," said Warren Erdman, chairman of the UM Board of Curators.

As the system continues its nationwide search for a successor, curators want someone who will continue the work started by Forsee and who is willing to take the job for at least five years. Forsee was hired in late 2007.

"You shoot for something approaching 10 years, but you realize that's probably a little on the long side of the range," Erdman said.

Rare are the schools that are led by the same individual for more than a decade. In Missouri, just 20 of 63 public and private institutions have a president or chancellor with at least 10 years on the job — and two of those are retiring, according to the Missouri Department of Higher Education.

Yet in the eyes of some educators, that's the way it should be. A school, they say, gains value from the new ideas and energy of a new president.

At the end of next month, John Carney will close out his six-year term as chancellor at the Missouri University of Science and Technology. Carney, 69, stayed a year longer than he planned to and is ready to retire to Boston to spend time with his family.

"A position like this, you shouldn't stay in it for life," Carney said. "Ten years should be the upper limit, even if you are doing a great job."

Others argue that as long as a president has the energy to keep up with the demands of the job, there are advantages to lengthy tenures.

Mark Wrighton is heading into his 17th year as chancellor at Washington University, putting him in a group of long-serving campus chiefs who include St. Louis University President Lawrence Biondi, in his 24th year, and Missouri Baptist’s R. Alton Lacey, who is in his 16th year.
With workdays starting before 5 a.m., Wrighton figures he puts in 15 hours a day during the spring and fall semesters, leaving little time for anything but work.

"Sometimes I'll joke with people when they ask what I do for fun in my free time. I say: email."

But at age 62, Wrighton said he still has much to accomplish and has no plans to leave the school anytime soon. "I know it's not a forever position. But I've had good health and I remain very enthusiastic," he said.

Wrighton's steady presence — and the long-term vision it offers — stands in stark contrast to that of a school like Southern Illinois University Carbondale, which has had five chancellors over the past half dozen years.

Rita Cheng, who has been in the post for 13 months, hopes to reverse the short-timer trend. Too much turnover can damage a school, Cheng said. But there are times when it is necessary.

"There are institutions that need to make changes in order to go in a different direction," said Cheng, who is striving to reverse declining enrollment and boost research funding.

With so many presidents departing, it would seem to raise questions about how successful schools can hope to be when looking for replacements. Are there enough strong candidates out there at a time when the job is, put simply, not as fun as it once was?

Search consultants say the increased pressures of the job do seem to be forcing some traditional candidates — top academic officers on campuses, for example — to shy away from presidential openings.

Still, they say that doesn't mean they can't find good people.

"We have to look harder. And we have to look in more places," said Dennis Barden, a Chicago-area search consultant. "But the caliber of candidates continues to be very strong."
Campus days are numbered

By Bob Roper

Sunday, July 17, 2011

With good reason, Columbia has long been called College Town USA. The collective impact on our economy and quality of life thanks to the University of Missouri, Stephens College and Columbia College cannot be overstated. So when warning signs about the future of higher education start flashing, it makes sense to pay attention.

Let’s take a break from bewailing the lack of appropriate state funding for MU, a hardy perennial in our community and a valid issue. Rather, let’s look at the systemic problems facing higher education.

First, here are some eye-opening quotes: Steve Forbes, the honcho at the magazine of the same name, titled a recent column in the magazine “Dinosaur U.” He quotes approvingly from the late management guru Peter Drucker, who before the end of the last century said, “Thirty years from now, the big university campuses will be relics.” US News & World Report recently opined, “If colleges were businesses, they would be ripe for hostile takeovers, complete with serious cost-cutting and painful reorganizations.” And to finish this desultory paragraph appropriately, here is a choice comment from Stephen Portch, former chancellor of the University System of Georgia: “Our system is bankrupt, and we’ve got to have a new model.” This comes from a higher education insider.

Perhaps the most striking evidence of a big problem is a recent Pew Research Study poll, which found 57 percent of the public says American higher education is doing a poor or only fair job of providing value for the money spent. The same poll found 76 percent of college presidents say their institutions are doing an excellent or good job. Unfortunately for them, the customer is always right. Perception is reality.

What is the problem? It is the confluence of several bad things happening at the same time. In the past 30 years, the cost of college tuition and fees has increased at roughly four times the rate of inflation. The cost of attending college has gone up 50 percent in the past decade, but incomes have remained stagnant. More and more expert commentators — Louis Lataif of Harvard, for example — say the cost of higher education is a “bubble,” and big tuition increases cannot continue — maybe not small ones either. States cannot help much because they are largely out of money.

In Missouri, another developing problem is demographic in nature: In the next few years, the number of Missouri high school graduates — part of the “supply” for our colleges and universities — will drop by 15 percent, at least for awhile.
Higher education spends a lot of money on such things as quality faculty, athletics, employee benefits, dorms, student food courts, administration — and administration bloat — and laboratories, among others. Fine, except for one thing: Recent studies (see “Academically Adrift: Limited Learning on College Campuses” by Richard Arum and Josipa Roksa) cast doubt on how much students are actually learning during their four or five years of study, which altogether cost $100,000 to $200,000.

Mom and Dad are starting to wonder about the value for the money, especially when they realize quality teaching so often takes a back seat to research. Or when they have to borrow a large amount of money to pay for those costs. Or when they realize student debt has been rising for years, but salaries for college graduates have not been rising. Or when they realize students can avoid academic rigor in their courses. Mediocre outcomes make it harder to get a good job and have a great career.

Most important, a cheaper alternative has arrived, via the Internet. As Forbes wrote in the column noted above, “The Internet is about to do to America’s universities and colleges what it’s done to media and entertainment — profoundly upend them.” Higher education, welcome to the world of legendary economist Joseph Schumpeter’s rule of “creative destruction,” whereby the old order is displaced by innovators who create better, less expensive and more efficient alternatives, or all of the above. In the context of this column, it’s called “disruptive innovation.”

Clayton Christensen, a professor at the Harvard Business School, has written extensively about how disruptive innovation is affecting higher education. Here is his definition: “Disruptive innovation is the process by which a sector that has previously served a limited few because its products and services were complicated, expensive and inaccessible is transformed into one whose products and services are simple, affordable, and convenient and serves many, no matter their wealth or expertise.”

Clearly, online learning fits that definition precisely.

No surprise, then, that the percentage of students taking at least one online course has risen from 10 percent in 2003 to 30 percent in 2009 and is expected to rise to 50 percent by 2014.

Next: The arc of online learning.

Tribune columnist Bob Roper is a former local banking and investment executive with a longstanding interest in public issues.
MU sees surge in natural resources interest

Enrollment data point to trends.

By Janese Silvey

Friday, July 15, 2011

The University of Missouri’s School of Natural Resources is enjoying a spike in enrollment, thanks to a new option that lets students add a sports management emphasis to their degree.

As of this week, administrators are expecting to see a 44.1 percent increase in the school’s total enrollment. Although that reflects growth in fisheries and wildlife science, forestry and other degree programs, the main driver is the sports management track added to the parks, recreation and tourism degree last year, Director Mark Ryan said.

Not only is it bringing in more incoming freshmen, but the sports add-on has caused older MU students to switch majors.

“We’re busting at the seams in some of our courses,” Ryan said. “We expected growth, but I’m not sure we fully recognized how rapid the growth would be.”

Total enrollment in the School of Natural Resources is expected to be 650 this coming year, up from 451 students last year.

Enrollment numbers right now are based on the number of students who have paid deposits and signed up for classes, but those numbers could change as the semester nears. Still, they show some trends in popular programs that likely will be reflected when the official census is taken this fall, said Ann Korschgen, vice provost for enrollment management.

Another school on campus intentionally scaled back enrollment this year. The School of Law is down 2.5 percent by design.

Typically, the school admits 150 new students each year, but this year, it cut admission off at 135, Dean Larry Dessem said.

“One reason is to have the right size of student body to better reflect market realities in the legal profession,” he said, referring to trends that show new lawyers are less in demand than they were before the economic downturn.
The second reason is that the school has added more hands-on components — such as opportunities to help out with legal services or draft legal documents — that require a smaller student-to-faculty ratio.

Applications to the MU School of Law were down about 17 percent, but there’s no correlation between that and the lower enrollment, Dessem said. MU still received 845 applications, allowing administrators to select the top students.

Other trends showing up in early enrollment numbers:

- Interest in the medical and health fields continues to grow. The College of Veterinary Medicine, the School of Nursing and the School of Health Professions all expect to see double-digit enrollment increases this year, while the School of Medicine expects a slight increase.

- Early numbers show a dip in enrollment in the College of Education, from 2,252 students last year to 2,149 this year, or a 4.6 percent decrease. Associate Dean for Academic Affairs Linda Bennett said the school is waiting to see who actually shows up.

“Through the years, our enrollment has stayed steady,” she said. “It’s probably better to look at enrollment data” after the census is taken.

- Total undergraduate enrollment is expected to be 24,152 this fall, up 4 percent from last year. Graduate enrollment, which includes students seeking master’s and doctoral degrees, is expected to be 2,993, up 3.9 percent.
Missouri gains more wineries

11:00 PM, Jul. 17, 2011 | Written by The Associated Press

CAPE GIRARDEAU -- Missouri has a long history of winemaking, and a number of new wineries are now seeking to add to that legacy.

The Southeast Missourian reports that 30 new wineries have opened in Missouri in the past two years. That brings to 99 the number of wineries in the state.

Suzanne VanderFeen, owner of Vines 2 Wines Excursions in Cape Girardeau, conducts tours of wineries.

"I would say we're busier now because there are more wineries to go to in the area, especially near Cape Girardeau," VanderFeen said. "A lot of the wineries have also expanded, so now they offer more of an experience with food and entertainment. Rothbrick is a winery that just opened up, and it's a good example of that. On top of wine tasting, they have horseback riding and cabins and they are very family-friendly."

Missouri was the nation's second-largest wine producer, behind New York, before Prohibition. The state experienced a rebirth of wineries in the 1960s, and the growth has increased markedly in recent years.

The Missouri Wine and Grape Board helps market the wineries. One effort is the Passport Program, which allows wine lovers to earn points each time they visit a winery in the state. Those points can be redeemed for prizes that include dinners and weekend getaways.

The board also has begun research at the University of Missouri aimed at developing better grape hybrids and new varieties better suited to Missouri's climate, said Danene Beedle, marketing director for the board.

Steve Bricknell, one of the owners of Rothbrick Winery near Shawneetown in southeast Missouri, said running a winery is a challenge.
"It's just like any other business," Bricknell said. "Most people have this romantic idea about owning a vineyard, but the truth of the matter is it's a lot of hard work. It's also a lesson in adaptability because you have variables that you can't control. The weather, for instance. That affects how the grapes grow and what kind of wine they're going to make. It also determines when you can pick your grapes, so you can't always work around a set schedule." Bricknell said the end product is worth all the effort.

"This is a product that you put your heart and soul into, and it's enjoyable to watch other people enjoy your product," he said. "That's actually the best part of it, I think. The money's not really the driving force. It's getting to share our wine and seeing people's faces when they're enjoying it."
Nixon walks political middle

Governor is a year out from his re-election bid.

11:00 PM, Jul. 17, 2011 | Written by David A. Lieb

JEFFERSON CITY -- Picture a rural dirt road -- the kind where grass grows in the middle between to two tracks about the width of a truck tire. Politically, one path is trod by Republicans; the other by Democrats; and Gov. Jay Nixon is walking down that grass in the middle.

A year out from his re-election campaign, Nixon has just completed an annual bill signing season in which he managed to appeal to fellow Democrats by vetoing several politically charged bills while simultaneously appeasing Republicans by allowing legislation on several of their hot-button issues to become law.

"He's positioned himself pretty well in the middle of the political spectrum," said Peverill Squire, a political science professor at the University of Missouri-Columbia.

The Republican-led legislature sent Nixon nearly 150 bills this year. He vetoed 14, allowed three to become law without his signature and signed the rest by last week's deadline.

The vetoes included several high-profile issues that split largely along partisan lines.

Chief among those was a veto of a congressional redistricting plan that eliminated a Democratic-leaning district in the St. Louis area to account for Missouri's loss of a seat under the 2010 Census. Although a few Democrats sided with Republicans to override Nixon's veto, most believed the map generally favored Republicans.

Nixon also upheld the Democratic Party position by vetoing legislation that could have required voters to show government-issued photo identification.

"I think to some extent, Governor Nixon is looking to mend fences with the Democrats," said George Connor, head of the political science department at Missouri State University. Most notably, some Democrats have been miffed because they don't believe Nixon did enough to help their candidates in 2010, when Republicans won both statewide offices on the ballot, ousted a Democratic congressman and gained seats in the state House and Senate.
Nixon vetoed a bill that would have made it harder to win workplace discrimination cases, traveling to St. Louis to do so in front of an audience that included minorities and woman -- groups that tend to vote for Democrats more than Republicans.

The governor also vetoed a bill that would have moved the state's presidential primary from February to March to comply with national Republican and Democratic party guidelines.

Nixon cited other reasons for vetoing the bill and said he supported the proposed change to the presidential primary. But the bill's demise has a greater effect on Republicans than Democrats, because President Barack Obama is not expected to face a serious challenge in the next year's Democratic primary whereas a large field will be vying for the Republican nomination.

After Nixon vetoed the elections bill, Democrats issued a statement defending his action while Republicans issued a statement decrying it.

That veto "seems to stick it to the Republicans more than the Democrats," Connor said.

Governors tend to veto bills for one of three reasons -- policy objections, partisan politics or to position themselves for a re-election campaign, Connor said. While Nixon sited policy grounds for his vetoes, several of his decisions also advanced the other two goals, Connor said.

The same criteria can be applied to bills that governors sign or allow to become law.

Nixon walked a political tightrope by allowing a bill imposing new restrictions on late-term abortions to become law without his signature. Although a fair number of Democrats joined Republicans in passing that legislation, other segments of the Democratic constituency oppose further limits on abortion rights.

"Not taking a stand on that makes it a little bit more palatable when you're running for re-election," Connor said.

Nixon similarly allowed another Republican-favored bill to become law without his signature.

That bill could allow Missouri to ignore some requirements of Obama's new federal health care law, if other states join a health care compact and Congress consents to its creation. Nixon said the bill was unlikely to have any practical effect, because Congress has not -- and may never -- allow states to form such a health care compact.
COLUMBIA MISSOURIAN

Japanese beetles cause problems for Boone County growers, homeowners

By Garrett Evans
July 16, 2011 | 10:20 p.m. CDT

COLUMBIA — A handsome but pesky creature has made its way to Columbia, and entomologists say it is here to stay.

The Japanese beetle arrived in mid-Missouri in June and began feasting on fruit trees, roses and other plants. Although they have only been in the vicinity for a little more than a decade, they can devastate about 300 species of plants in the urban landscape.

Adult beetles are about a half-inch long with a green and copper metallic body that looks like armor.

They live for most of one year, developing into white larvae through winter and maturing during the spring.

The bugs emerge the first week of June and stay until mid-August, with the highest number of beetles present between July 10 and 20. After that, the beetles gradually die off.

**Japanese beetles are expected to grow in population through the next five to seven years, according to MU entomologist Wayne Bailey. He said he caught more than 1,600 beetles in three days with a single trap.**

The beetles were considered an established population in Boone County around the year 2000, making their way across the state from the St. Louis area, MU entomologist Ben Puttler said.

They are attracted to plants, shrubs and sweet-smelling fruit trees. Their damage can be identified by a lacy, net-like pattern on the leaves.

The beetles are active on warm, sunny days and work in groups.
Puttler said they are most attracted to roses and linden trees in Boone County. Some linden trees have been damaged on the MU campus, blemished by a browning effect on the foliage. They are also attracted to grapes, apples and peaches.

For farmers and Columbia residents, protecting fruit trees and plants may be more of a challenge than they expect.

“Japanese beetles are annual, and they are so mobile that even if you treat your yard, they might migrate from a neighbor’s yard,” Puttler said.

There are several ways to try and get rid of them.

Bailey suggests staple insecticides such as Sevin dust.

"Sevin is probably one of the best because it's readily available and relatively safe to most everything around," he said.

Other methods include handpicking the beetles from the leaves, planting herbs such as garlic and chives near the garden and using traps.
Resistant weeds leave farmers desperate

As effectiveness of herbicides wanes, some try mixtures of older, more toxic chemicals, others pay itinerant workers to weed by hand.

Farmers in the state's south are resorting to some old-fashioned tactics.

Weeds in cotton fields have gotten so tenacious — some with stems 4-inches around — that farmers are paying itinerant crews to chop them down by hand.

"In the Bootheel they're hiring people to go out there with hoes," said Blake Hurst, president of the Missouri Farm Bureau. "I swung a hoe for 15 years, and I fail to see the romance in it."

The problem, farmers and weed scientists say, is getting worse: Weeds are becoming increasingly resistant to Monsanto's Roundup, sold generically as glyphosate, forcing farmers to use other herbicides or "multiple modes of action." But during this season especially farmers are finding that these other modes of action aren't working either — and there appears to be little relief on the horizon. In Missouri, herbicide dealers have sold out of Cobra, one of the herbicides most widely used in tandem with glyphosate.

"Are they running out of options?" asked Aaron Hager, a weed scientist with the University of Illinois at Urbana-Champaign. "The simple answer is yes."

Farmers across the Midwest and South are, increasingly, using herbicide cocktails to combat weeds in cotton, corn and soybean fields.

"They're using about every bullet they have in their gun," said Derek Samples, a dealer with Agro Distribution in Portageville, about 150 miles south of St. Louis. "It's just been a nasty year."

That worries environmental scientists who say these combinations employ older, more toxic herbicides that glyphosate was marketed to replace. In some areas of the state, certain weeds have become resistant to three herbicides. In Illinois, some weeds have become resistant to four.

"It's rather ironic that we were sold glyphosate as an alternative to these older pesticides, and now farmers are using them again," said Brett Lorenzen, a legal analyst with the Environmental Working
Group, a Washington-based environmental advocacy group. "But that's part of the pattern of the pesticide industry."

RELIANCE BACKFIRES

Farmers say they're frustrated, not least because these additional herbicides and strategies are costing them profits. They admit, however, that commodity prices are high enough to justify the additional expenditure.

"It's easily costing $30 an acre for the hand weeding, and the pre-emergence herbicides are costing $10 and $20 an acre," said Tom Jennings, who farms cotton, rice, soy and corn near Sikeston. "If we see the markets drop back down, the economics are going to get a lot more difficult. As high as it is, we can afford some hand labor."

Over the past 15 years glyphosate has become a ubiquitous product on American farms. Its rise has coincided with unprecedented crop yields and profits for farmers and has helped propel Creve Couer-based Monsanto into the world's most dominant seed maker.

But reliance on glyphosate, scientists say, has led to an explosion in weeds that are genetically adapting to withstand its application. These weeds adapt faster and more vigorously than their weed cousins, choking fields and clogging irrigation ditches so badly water can't pass through.

"Pollen can transfer the resistant trait; that's the problem," said Kevin Bradley, a weed scientist with the University of Missouri. "There's not much we can do about pollen flying through the air, and that's why we see such rapid spread of resistance."

In recent years, Monsanto has slashed prices, offered rebates to farmers and given incentives to buy other herbicides, even those of the company's competitors. The company has acknowledged the situation and admitted that, perhaps, it could have more aggressively worked to get the message out about alternative strategies. Farmers, too, have accepted some of the blame.

"It was so effective and so cheap compared to everything else, that's all you used," Jennings said. "Now we have problems out here and we don't have new herbicides. Before Roundup you had a new product every two or three years. Almost all the new products are just combinations of old products. There's no new chemistry."

THE SMALL PRINT

Critics of the industry point out that Monsanto and its competitors have known about glyphosate resistance since the mid-1990s, when crops genetically engineered to withstand its application first hit the market. They say the companies should have more clearly warned about over-reliance on glyphosate sooner. Government-required labels urged farmers to use other herbicides in conjunction with glyphosate, but these suggestions were tucked away in fine print.
"It's hard to read a 54-page booklet," Lorenzen said. "Monsanto has been saying don't just use glyphosate, but farmers don't have time to read the label."

Lorenzen and other industry critics worry that the new herbicide cocktails farmers are using haven't been tested. The Environmental Protection Agency reviews individual herbicides, not combinations. "Nobody tests what happens when all those chemicals are combined together," he said. "Nobody knows."

Analysts, too, worry that the problem could hit profits.

"They've taken a big hit with [Roundup] already," said Jeff Windau, an analyst with Edward Jones. "So moving forward there could be more pressure on sales."

Windau also said that if farmers start spending too much to combat weeds then the benefits of genetically modified seed could diminish and they will stop buying it.

"There definitely could be issues there," he said.

There is, however, some hope in the pipeline. Monsanto is working on developing soybeans and cotton that are resistant to the chemical dicamba. The cotton could be on the market within three years.

Until then, farmers say, they're going to be spending more time in their fields, applying more chemicals, tilling and hoeing.

"Fortunately," Jennings said, "weeds haven't developed a resistance to cold steel."