

SPORTS

NEW STREAK

Badgers get back to their winning ways at home, beat Northwestern 73-58 **PAGE E1**



SPECTRUM

COST OF 'SIN'

Readers comment on the proposal to raise the cigarette tax **PAGE F1**



★★★

T H U R S D A Y



Wisconsin State Journal

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Some simple spots on the wings of a fruit fly



are creating a major buzz in the science world.



THE KEY TO



EVOLUTION?



By Ron Seely
Wisconsin State Journal

Curious about how amorous male fruit flies dance and display their spotted wings during courtship, UW-Madison researchers dug deeply into the genetic underpinnings of the behavior and are shedding new light on the mechanisms that drive evolution.

Scientists working in the laboratory of biologist Sean Carroll have described the genetic process that accounts for the alluring spots on the wings of some male fruit flies. And they have isolated the section of the genome involved by transferring the genetic material responsible for the spots to the eggs of fruit flies unlucky enough to have plain wings.

The eggs produced fruit flies with the spot-producing gene and one fly actually was transformed, displaying a faint but definite female-attracting smudge.

The implications of the appearance of that smudge are considerable — especially for the fruit fly — in the context of evolution. The smudge will make it easier for the fly to attract a mate and produce offspring. The male offspring will be more likely to have the smudge, prosper and multiply. Those that don't will not do as well.

That, in a fruit fly, is a working example of Charles Darwin's idea about how nature selects characteristics that allow for survival.

But Darwin did not have the benefit of modern science to explain the nuts and bolts of evolution, and scientists such as Carroll are filling in the gaps.

The findings, published Wednesday in the journal *Nature* in an article titled "Chance Caught on the Wing," provides one of the first and most convincing glimpses of how evolution works at the genetic level. Scientists have a good grasp of the longer evolutionary process, of change in species over time, but little understanding of what happens in genes

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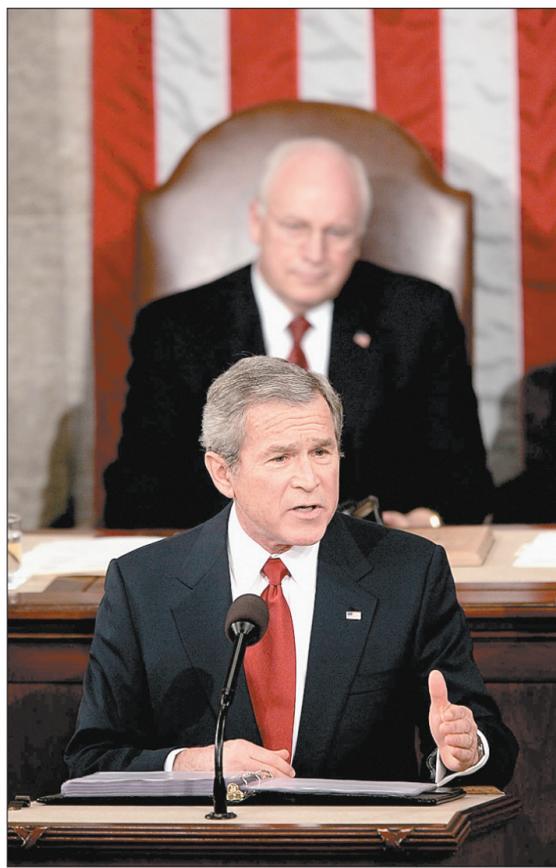
UW-Madison photos

WHAT'S WITH THE WINGS?

Different species of fruit flies display remarkably different patterns on their wings. Observing how those with decorations such as spots seem to be able to attract mates more easily, researchers at UW-Madison dug deeply into the molecular mechanisms that control what is, in essence, the machinery of evolution. By transferring genes and parts of genes from flies with spots on their wings to flies with plain wings, they were able to find the molecular switches that control where pigmentation is deployed on the wing.

THE STATE OF THE UNION ADDRESS

A call to 'save' Social Security



Charles Dharapak - Associated Press

Vice President Dick Cheney looks on as President Bush gives his State of the Union address Wednesday, focusing heavily on domestic issues.

Bush says a gradual overhaul of Social Security is essential

By Terence Hunt
Associated Press

WASHINGTON — Republicans repeatedly jumped to their feet, cheering and applauding. Democrats scowled in their seats, some protesting out loud as President Bush rattled off new details of his agenda for change at home.

Yet, when these outsized partisan displays died down at the first State of the Union address of Bush's second term, the magnitude and political risks of his proposals hung in the air — apparent to those on both sides of the aisle.

He was proposing no less than the most ambitious over-

haul of the federal retirement system since Social Security was created as the centerpiece of Franklin D. Roosevelt's New Deal seven decades ago.

Bush challenged a hesitant Congress to "strengthen and save" Social Security, saying the nation's costliest social program faced bankruptcy unless changed. Bush's plan would cut guaranteed retirement benefits for younger Americans but would not affect checks for people now 55 and older.

He pledged to work with Congress "to find the most effective combination of reforms," although he has ruled

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AT A GLANCE

Highlights from President Bush's speech Wednesday night:

SOCIAL SECURITY

Once fully phased in, Bush's plan would allow workers who will be 55 or younger this year to place as much as two-thirds of their Social Security payroll tax into private accounts that they could invest in stocks and bonds and draw on only after retiring.

He did not say how he would pay for his plan, and did not commit himself to any particular course of cuts in the guaranteed benefit to restore the retirement system's financial health.

"I know that none of these reforms would be easy. But we have to move ahead with courage and honesty, because our children's retirement security is more important than partisan politics."

IRAQ

Bush promised not to abandon the U.S. mission there before the Iraqis are capable of providing their own security.

"We will not set an artificial timetable for leaving Iraq, because that would embolden the terrorists and make them believe they can wait us out."

MIDDLE EAST

Bush asked Congress for \$350 million to support the Palestinians under their new president, Mahmoud Abbas.

SPENDING

The budget Bush will propose on Monday would substantially reduce or eliminate more than 150 programs.

"The principle here is clear. A taxpayer dollar must be spent wisely, or not at all."

OTHER ISSUES

The president repeated his support for a constitutional amendment to ban same-sex marriage and limits on stem-cell research, for a "guest worker" program for immigrants from Mexico and elsewhere in Latin America, limits on medical malpractice lawsuits and awards, a simplified federal income tax and extending the education standards testing for secondary schools into high schools.

REACTION AND ANALYSIS OF THE SPEECH ON PAGE A3

'Life's So Good,' but is the new tourism slogan?

By Patricia Simms
Wisconsin State Journal

Debra Bresser, who works at the Wisconsin Department of Commerce, wrinkled her nose just a little at the state's new tourism slogan, "Wisconsin — Life's So Good."

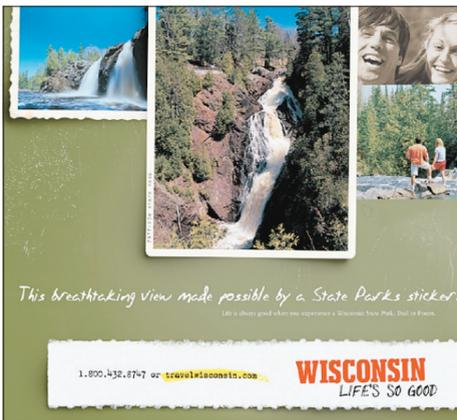
Earlier Wednesday, Gov. Jim Doyle and Tourism Secretary Jim Holperin announced the state would spend about \$2 million this

summer to saturate airwaves, papers and billboards with the slogan to attract tourists from places such as Chicago and St. Paul, Minn.

Tight budget times make that seem like a lot of money, Bresser said. "What's wrong with 'Escape to Wisconsin'?" she finally asked, noting a past slogan.

Doyle also said he was proposing a \$3.8 million budget increase for tourism marketing over the next two years, in addition to the \$8.8 million the department already

Please see **SLOGAN**, Page A9



A new ad touts the beauty of Wisconsin's state parks, one of several with the new "Life's So Good" slogan that will dominate advertising promoting tourism.

State should've come to me

At first glance, it's hard to get excited about our new tourism slogan: "Wisconsin — Life's so good."

Maybe it's because we're in the dead of winter, when the snow, sky and my complexion are all ashen.

"Wisconsin — Life's so gray." Well, at least February is better than March, when everything melts. With a pair of scissors, you could change our slogan to "Wisconsin — Life's slow goo."

Or maybe we could alter it to advertise those naughty cheating spouse services that keep popping



SUSAN LAMPERT SMITH

up in my e-mail: "Wisconsin — Wife's so good."

Sadly, I think the opportunities for mutating tourism slogans aren't as good as they used to be. The most fun tourism slogan was the "Escape to Wisconsin" campaign of the 1980s.

Remember those green bumper stickers? (Remember bumper stickers? They've been replaced by "window clings.") The "Escape to Wisconsin" campaign just begged for clever scissors surgery. The anti-tourism slogan "Escape

Please see **SMITH**, Page A9



Today
Clouds and sun.
High 41.
Winds: W
4-8 mph.



Tonight
Partly cloudy.
Low 24.
Details/
back of Local

INSIDE

Business	C1	Local news	B1	Obituaries	A4	Sports	E1
Classifieds	D1	Movies	Rhythm	Opinion	A8	Spectrum	F1
Comics	F4	Nation	A3	Scoreboard	E5	World	A5

RHYTHM

Country music doubleheader tonight
Country music artists Montgomery Gentry and Trace Adkins headline a show tonight at the Dane County Coliseum.