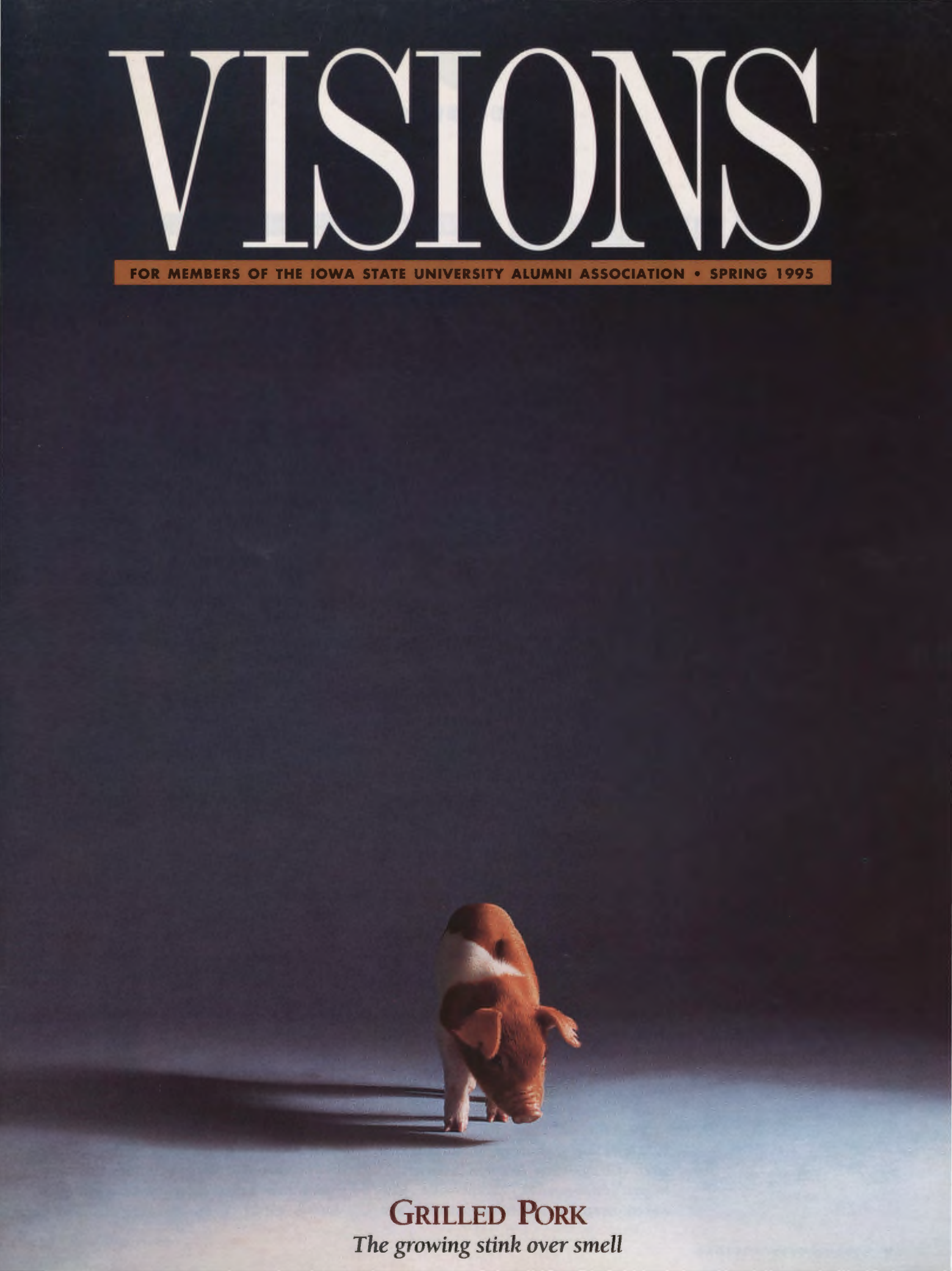
VISIONS

FOR MEMBERS OF THE IOWA STATE UNIVERSITY ALUMNI ASSOCIATION • SPRING 1995



GRILLED PORK

The growing stink over smell

Letters of Intent

By Debra Gibson

EVEN TODAY, I'M GIDDY AT THE PROSPECT OF A personal letter poking out the stack of bills and catalogs. I *like* the diatribes tucked into Christmas cards; it becomes my challenge to pursue the prose amidst the precocious kids and the new Explorer and the getaways to Maui. It makes perfect sense to me that the *Griffin and Sabine* novels established residence on the bestseller list. Could there be a finer romance than one burgeoned on filmy pages that criss-crossed the continents? In a pen-pal world, we can shape ourselves and our lives beyond recognition, express our emotions and opinions with an abandonment the real world denies. One could argue that the rampant popularity of Cyberspace is nothing but a throwback to the days of wooing with the written word.

With that facelessness sometimes comes bravado. There is courage in spleen venting *sans* eye contact. Newspaper and magazine editors paint bullseyes on their egos when they invite readers' letters; much that is slung has less to do with story content than assessments of editors' anatomical parts. I was annoyed when called everything from "femiNazi" to "homophobe" when I wrote a VISIONS column nearly two years ago on whether gay students should live in university married housing. I was sickened when a USA Today reader taunted columnist Michael Gartner on the sudden death of Gartner's teenaged son last summer.

But mostly I enjoy letters to the editor, whether they're in TIME or VISIONS. Sometimes I silently cheer, occasionally I silently seethe. Always I resist the temptation to pound out a quick "editor's note;" I live to have the last word. As this magazine enters its eighth year, I am encouraged that our letter writers are more prolific, in both senses of the word. Though I've yet to understand why women rarely, if ever, write, I am proud that we've actually developed a following. And to our most faithful letter writer, I recently asked, "Why VISIONS?"

"Pearl Hogrefe," replied Robert F. Jones, a 1952 Iowa State graduate and author of at least seven VISIONS letters. As one of Professor Hogrefe's creative writing students at ISC, Jones was encouraged to express his opinions in writing, and has, the past 40-plus years. Still cranking out his convictions on his trusty manual typewriter, Jones has offered a wide range of advice to VISIONS, including:

"Your 'Granny Goes To College' story aroused my interest but did not satisfy." Summer 1989

"The PC [politically correct] movement is like a cancer that strives to make education plain vanilla while suppressing ideas which stimulate thought. VISIONS is like a vaccination that impedes the spread of thought control virus." Spring 1992

"Diversity does not have to include every fetish and unnatural lifestyle known to humankind. It would be enough if the sexes and races got along and worked in harmony." Fall 1993

"When I was an NROTC sudent at Iowa State ... we studied military history in hopes that we could avoid repeating mistakes of the past. ... The kinds of results needed to stabilize the world's trouble spots are not likely to be achieved by an all-volunteer force controlled and directed by civilians in the United Nations." Spring 1994

Now a retired insurance claims examiner living in Michigan, Jones himself has inspired letters to the editor. For several years, he has penned fishing and hunting stories for magazines under the pseudonym "Pickerel Bob." And while not all his readers agreed with him, he "just likes to challenge people to think." So what's his challenge to VISIONS?

"Well, you need to inform us and keep our interests in ongoing education alive. You need to stimulate thought and expression," Jones, now 65, says. "Keep giving us the success stories, like the one on the cover last time [Professor Derrick Rollins]. And remember that if you only stick with subjects that don't challenge people, your magazine will be so blah no one will read it."

Yes, but aren't those controversies the very subjects that have riled you into writing?

"Well," Jones acknowledges, "you do have to go out on a limb once in awhile, so maybe I'm wrong about the issues of gays and straights. I'm willing to concede there's another point of view, even if many of us are uncomfortable with it.

"I guess it's like taking medicine—if it tastes bad, you don't enjoy it. But it just might be good for you."

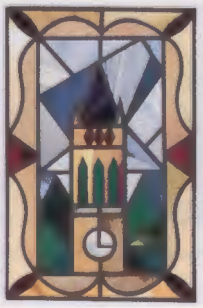
ILLUSTRATION BY MARK MARTURELLO

LINE UP

FEATURES

14

14
Raising a Stink
How Iowa's first-in-the-nation pork industry handles the simmering odor brouhaha will go a long way toward sniffing out its future.
BY DAN DAVENPORT


20

20
Church and State U.
Chapter-and-verse evidence— along with a million or so other reasons — as to why studying Catholicism is at the heart of the land-grant mission.
BY DAN DAVENPORT

24

24
Memories of a Manhattan Over Ice
A retired Iowa State University engineering professor melts away a quarter-century to showcase an Arctic blast from the past.
BY RICHARD L. HANDY

DEPARTMENTS

2 Front Row Seat
4 Letters
6 The Hub
12 Inquiry
28 Association
29 Workout
30 Frame of Reference

30

• COVER PHOTO BY JIM HEEMSTRA

VISIONS
FOR MEMBERS OF THE IOWA STATE UNIVERSITY ALUMNI ASSOCIATION

EDITOR: Debra Solberg Gibson '81
ASSOCIATE EDITOR: Dan E. Davenport '84
EDITORIAL ASST: Sandi L. Kellen
STAFF PHOTOGRAPHER: Jim Heemstra
DESIGN: Mauck+Associates

VISIONS (ISSN 1071-5886) is published quarterly by the Iowa State Alumni Association, Alumni Suite, Memorial Union, 2229 Lincoln Way, Ames, Iowa 50014-7164. Third-class postage paid at Ames, Iowa, and at additional mailing offices.

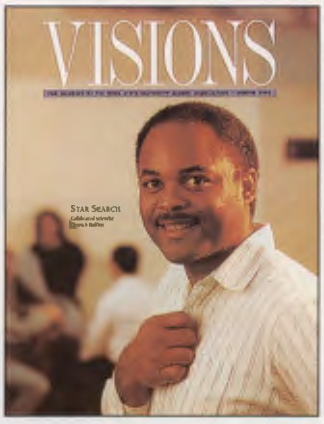
Copyrighted 1995 by the ISU Alumni Association, James A. Hopson, executive director.

POSTMASTER: Send changes of address to: VISIONS, Alumni Suite, Memorial Union, 2229 Lincoln Way, Ames, Iowa 50014-7164. Telephone (515) 294-6515.

VOLUME 8 NO. 1

Printed on Recycled paper

LETTERS



VISIONS magazine strives to celebrate the power of thoughts and ideas. You, the reader, are the ultimate judge of success in this endeavor, making your opinions highly regarded and your letters greatly encouraged. Please send letters to: VISIONS editor, Alumni Suite, Memorial Union, 2229 Lincoln Way, Ames, IA 50014-7164.

Poll Position: Nay

I sure hope Magid donated its services *(Front Row Seat, Winter 1995)*. Polling 325 out of the many thousands that must be on your mailing list does not produce a valid sample. If you doubt my opinion, check with the Psychology Department.

I read letters first, then your editorial, then the piece at the end of the book. I then scan the rest and read selectively. VISIONS has been the one useable fringe of my Alumni Association life membership.

I already get up to 12 pieces of junk mail a day. I don't need another in the form of "ISU Today," formerly known as VISIONS. That will get consigned to the circular file without being read.

Robert F. Jones, '52
Warren, Michigan

Timely Tribute

The flippant, impudent and shallow coverage *(The Hub, Fall 1994)* of the death of former Secretary of Agriculture Ezra Taft Benson is not in keeping with the excellence usually attributed to ISU Alumni Association activities. Consider that during his tenure as Secretary, Benson:

•Managed the Agricultural Trade Development and Assistance Act of 1954 (Public Law 480) which proved to be of major importance in disposing of farm products abroad and in aiding the economies of developing countries.

I ALREADY GET UP TO 12 PIECES OF JUNK MAIL A DAY. I DON'T NEED ANOTHER IN THE FORM OF "ISU TODAY," FORMERLY KNOWN AS VISIONS. THAT WILL GET CONSIGNED TO THE CIRCULAR FILE WITHOUT BEING READ.

•Implemented the transfer of the Foreign Agricultural Service from the Department of State to the Department of Agriculture "... in order to sharpen the effort to find new world markets for our agricultural products."

•Administered the Watershed Protection and Flood Prevention Act, which marked a new approach to land and water conservation by providing assistance, loans and cost sharing for small flood water-retarding dams.

•Administered the Soil Bank of 1956, which in part retired almost 29 million acres on which conservation practices were carried out.

•Established eight regional laboratories aimed at the increased production of wood, and developed an "Operations Outdoors" plan for the improvement and establishment of recreational areas in the national forests.

•Emphasized adequate research programs as reflected by the increase of appropriations in 1960 by 168 percent over 1954.

•Organized a bipartisan Commission on the Industrial Use of Agricultural Commodities which led to seven recommendations, carried out by government and industry. One result was work on corn for motor fuel.

•Organized a rural development program coordinating the resources of government agencies and private enterprises to bear on areas with low rural income, to improve prospects for part-time farming and non-farm jobs and increase opportunities for training.

•Reorganized the Department of Agriculture to "... improve its organization in accordance with sound principles of public administration and practice, strict efficiency and economy."

•Issued and followed an initial "General Statement on Agricultural Policy," one principle of which was, "The most important method of promoting the longtime welfare of farm people and the Nation lay in the support of adequate programs of research and education in the production, processing, marketing and utilization of farm products and in rural living."

Also consider that during his tenure as president of the Mormon Church, its membership increased from 5.92 million to 8.82 million.

Seely G. Lodwick, '42
Wever, Iowa

LETTERS

Matter of Style

I greatly appreciate VISIONS and its coverage of many interesting and varied topics of Iowa State University. However, following *The Chicago Manual of Style*, and as recommended to me by the Iowa State University Press, I have a few suggestions for your copy editor:

1. Titles to books, periodicals, newspapers, stage plays, operas, ballets, TV programs, etc. should be italicized with the body of normal type, but not italicized within the body of italicized type. One of several examples: "And so now, to a degree, has *VISIONS*." (Winter 1995, p. 2)

2. "In a series consisting of three or more elements, the elements are separated by commas. When a conjunction joins the last two elements in a series, a comma is used before the conjunction ..." (*The Chicago Manual of Style*, p. 143). One of several examples: "Typically, stories about sports, nostalgia, successful fellow graduates and current issues affecting the university." (Winter 1995, p. 2)

3. The use of "less" for "fewer": "Less" means to a smaller extent, amount, or degree; "fewer" means a smaller number. One of several examples: "You'll notice only 32 pages in this issue, 16 less than you are accustomed." (Winter 1995, p. 2)

I GREATLY APPRECIATE VISIONS AND ITS COVERAGE OF MANY INTERESTING AND VARIED TOPICS OF IOWA STATE UNIVERSITY. HOWEVER . . .

Thank you, again, and keep up the good work.

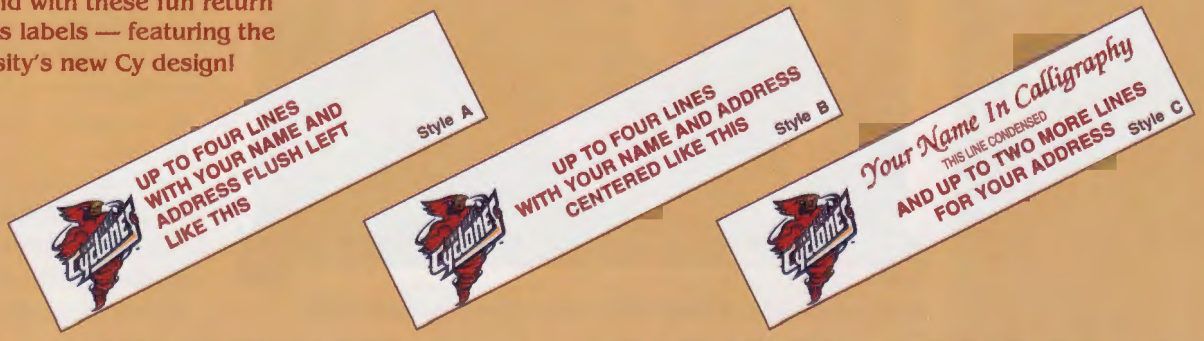
Richard L. Sanner, '49
Clemson, South Carolina

[Editor's Note: VISIONS' writing incorporates the guidelines of the Associated Press Stylebook. But not even AP would approve of the "less/fewer" blunder.]

LABEL YOURSELF A CYCLONE FAN!

IOWA STATE UNIVERSITY
Alumni Association

Color your envelopes cardinal and gold with these fun return address labels — featuring the university's new Cy design!



Please Print Label Name and Address

This Line Condensed on Style C

Are you a member of the ISU Alumni Association?		Yes	No
2 Sheets (90 Labels)	4 Sheets (180 Labels)	10 Sheets (450 Labels)	
Member: $6 Non-member: $7	Member: $10 Non-member: $12	Member: $20 Non-member: $25	

Qty. ____ Sheets of Style ____ = Total $ ____

Enclose check and mail order to:
Iowa State University Alumni Association
2229 Lincoln Way
Ames, IA 50014-7164

Ringing in the hearts of all

ISU PHOTO SERVICE

▲ Jim Wilson at the September Campanile rededication.

JIM WILSON WAS ONE OF THE LUCKY ONES. THOUGH ACUTELY AWARE OF HIS OWN MORTALITY — 94 YEARS GIVES A FELLOW PLENTY OF TIME TO PONDER SUCH THINGS — HE DIED KNOWING FULL WELL HE'D NOT BE FORGOTTEN. THOUGH THEY MAY NOT KNOW HIM BY NAME OR FACE, TENS OF THOUSANDS OF IOWA STATE UNIVERSITY GRADUATES WILL FOREVER HOLD A SPECIAL SPOT IN THEIR HEARTS ON RESERVE FOR THE MAN WHO PENNED *THE BELLS OF IOWA STATE*.

As another legendary Iowa State figure — Carl Hamilton, also deceased — once told Wilson, "It will outlive you by a thousand years, if Iowa State and the human race are still around that long."

James C. Wilson died of lung cancer Jan. 31, 63 years after being fired from Iowa State College in the depths of the Depression. Though not an alumnus — he graduated from Nebraska, which he never felt rightfully recognized his exploits — he entered a contest to write a song for Iowa State College. He won the $100 prize, which he used as a down payment on a home in Ohio. In the ensuing years, his travel lectures sent him, his wife, Alice, and their three children criss-crossing the country.

PHOTO COURTESY WILSON FAMILY

▲ Jim and Alice Wilson and family, during a stop on their cross-country travels.

"But there's no question, after all the things he did, [*The Bells*] made him the most proud," says his son, Steve Wilson. "He always said, 'I hope I've made a positive imprint.' He knew, with that song, he had."

And he basked in it. In his 1994 Christmas letter, he wrote of his visit to the ISU campus that fall as guest of honor of the Campanile rededication ceremony. He wrote, correctly, that, "I have become a living legend at Iowa State as *The Bells of Iowa State* has found its way into the hearts of Iowa Staters ..."

Jim Wilson once decided to work on a second verse for his song. After a number of hours of fruitless pondering, he stepped back and realized nothing he could do would make it better. "Everything he could think of, everything necessary," says Steve Wilson, "was in that verse. The physical, the spiritual, the past, the future. There was nothing more to say."

Indeed:

Green hills for thy throne,
and for crown a golden melody,
Ringing in the hearts of all
Who bring thee love and loyalty.
Dear Alma Mater, make our
spirits great,
True and valiant, like The Bells of
Iowa State.

ISU alumnus returns to guide engineering college

THE RÉSUMÉ OF IOWA STATE'S NEW COLLEGE of Engineering dean has an impressive mix of academic and private industry accomplishments.

In February, the university announced the hiring of James L. Melsa to replace former Dean David Kao, who left the post last summer. Melsa, who earned his bachelor's degree from ISU in 1960, comes back to the campus July 1 from telecommunications equipment manufacturer Tellabs Inc., in Lisle, Ill. He was the company's vice president of strategic quality and process management.

Prior to his 11 years at Tellabs, Melsa toiled for a quarter-century in academe. His stops include the University of Arizona, Southern Methodist University and the University of Notre Dame. In 1984, he left Notre Dame as chair of its electrical engineering department.

Melsa *(left)* guided Tellabs' first research organization and later held responsibility for all of the company's research and product development efforts. His own research has focused on speech encoding and digital signal processing.

Melsa, ISU's seventh engineering dean, earned his master's (1962) and doctoral ('65) degrees from the University of Arizona.

TOP 10

TOP 10 RECIPIENTS OF UNDERGRADUATE STUDENT TUITION AND FEES, PER SEMESTER:

10. United Students of Iowa allocation: $.75
9. Building maintenance: $1.16
8. New health center building project: $8
7. Recreation activity fee: $9.30
6. Cy-Ride: $14.47
5. Government of the Student Body allocation: $22.56
4. Debt service for Memorial Union, Hilton Coliseum, Recreation/Athletic Facility: $28.65
3. Special services fee (including Union operations, Student Union Board programming and intercollegiate athletics): $33.18
1. (tie) Student health fee and computer fee: $40*

Source: Government of the Student Body
**Note: Computer fee for engineering students is $120*

FATTENING UP at Waller's *Café*

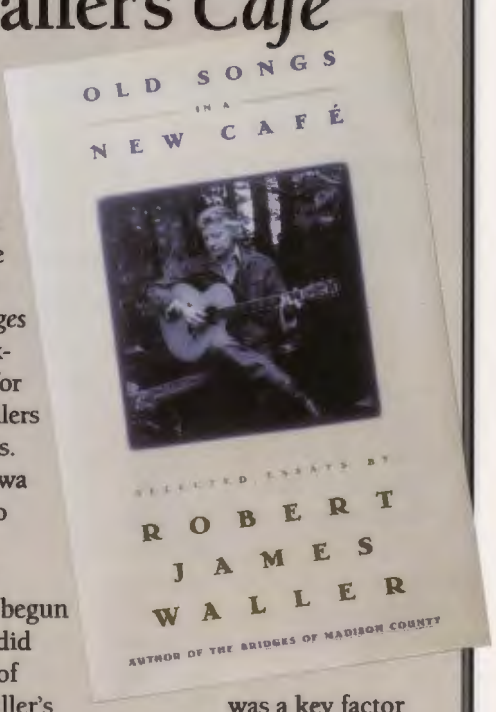
THE REVIEWERS HAVEN'T been kind to Robert James Waller, but just try finding a publisher who will badmouth the guy. He's been a cottage industry since his 1993 publication of *The Bridges of Madison County*, making carloads of money for publishers, agents, retailers and, soon, moviemakers.

Now you can add Iowa State University Press to the list.

No, the press hasn't changed its policy and begun printing fiction. But it did have the good fortune of publishing some of Waller's non-fiction back when he was an unknown University of Northern Iowa business professor. Two of those books — *Just Beyond the Firelight* (1988) and *One Good Road is Enough* (1990) — have become cash cows for the press.

After selling the books' rights to Waller's New York publisher, Warner, in 1993, the press has hauled in more than $240,000 in royalties. Warner culled selections from both and published them in its *Old Songs in a New Café*. That book, riding the *Bridges* tsunami, sold more than 400,000 copies and spent 13 weeks on the New York Times best-seller list.

The quarter of a million

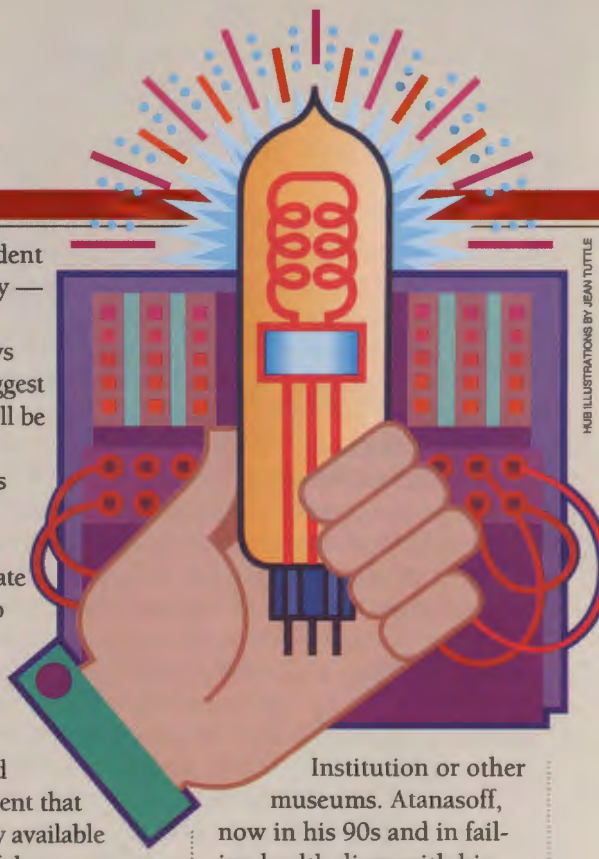


was a key factor in ISU Press' record $51,794 surplus in '93-94. Yet it wasn't its biggest seller; *Iowa's Lost Summer*, a Des Moines Register picture book chronicling the floods of '93, brought in $260,000.

"Even though [*Old Songs*] did well because of *Bridges*, this wasn't just a windfall for us," says ISU Press Director Linda Speth. "The people who were here five years ago were the first people to publish Robert Waller."

The $240,000 isn't unheard of at the ISU Press, but it is significant. Speth says it has published two million sellers, including a book called *Better Farm Accounting*. But there's no truth to the rumor that Meryl Streep has been angling for *that* lead.

What? No mouse?



HUB ILLUSTRATIONS BY JEAN TUTTLE

GEORGE STRAWN, A MAN who's paid to keep Iowa State University at the vanguard of computer technology, is working vigorously this year to build a clumsy, methodical computer as big as a cow and twice as slow. He is willing to spend up to $250,000 on the project.

Has the man's hard drive gone haywire?

Not at all. As director of ISU's Computation Center, he does spend much of his time eyeing the future of his industry. But he's well aware that the computer's past started just a couple hundred yards from his office some 55 years ago.

"It's important that one of the most important intellectual developments of mankind occurred here," he says. Of course he refers to former ISU Professor John V. Atanasoff's invention of the world's first electronic computer. Strawn wants to commemorate that feat by replicating the machine and running it exactly ... once.

"Keeping it running would be an insurmountable challenge," he says.

Building it will be no cinch, either — thus the hefty cost, all of which will be paid by private donations. There was no fanfare when Atanasoff completed his project in 1941. Iowa State failed to attain patents — an omission which haunts the university to this day — and the machine was all but destroyed over the years. Only a few pieces of the original ABC Computer — named after Atanasoff and grad student Clifford Berry — remain.

Strawn says one of the biggest challenges will be locating 300 vacuum tubes similar to those in existence in the late '30s. He's also looking for antiquated capacitors, resistors and other assorted radio equipment that was so readily available in the days of the New Deal.

The university has assembled a team of engineers to carry out the project this year. Strawn says the team will build three replicas: One for ISU, one for Atanasoff's family and one for potential display at the Smithsonian Institution or other museums. Atanasoff, now in his 90s and in failing health, lives with his wife in the Washington, D.C., area.

"He told us, through his wife, that he's thrilled that we're bringing the computer back to life," Strawn says.

As would any father, given the chance to see his child born again.

He shoots baskets, doesn't he?

IN THE DOZEN YEARS OF THE "5-for-5" contest at halftime of Iowa State men's basketball games, more than a few shooters have failed to even hit the rim in their five 15-foot attempts. So when Mike Albright managed to draw iron on one of his shots on Jan. 29, he didn't completely embarrass himself.

Of course the fact that the other four hit nothing but the bottom of the net didn't hurt, either.

GARY CLARKE

▲ Mike Albright

The 14,000 fans at Hilton Coliseum — after all those oh-fers and maybe 400 air balls — surely figured they'd never see anyone step cold onto the floor and bang in five straight. In the beginning, the standard line was that Barry Stevens couldn't even walk on in Haggars and Florsheims and drill five straight. Then it was Jeff Hornacek, Jeff Grayer, Justus Thigpen and, finally, Fred Hoiberg. If the best sharpshooters in school history couldn't do it, what could we expect from 49-year-old Mike Albright, who was cut from his high school hoops team?

Only perfection.

"The crowd really pumped me up," says Albright, a former Ames resident who moved back from Hawaii just two weeks before winning the Buick Skylark from Ames' Benson Motors. He's an instructional technologist at ISU's Media Resources Center, and was sitting in the fortuitous seat only because a buddy was out of town and loaned him the ticket.

"It was just like shooting baskets in my old driveway."

Review results: No gender hinder

IOWA STATE'S DEPARTMENT OF INTERCOLLEGIATE ATHLETICS has survived an exhaustive, three-plus-year compliance review by the U.S. Department of Education's Office for Civil Rights (OCR).

Generally, the OCR found that Iowa State has been complying with Title IX of the 1972 Education Amendments forbidding sex discrimination at educational institutions. But it and the university have agreed several changes will be made in the near future, including equivalent:

- food allowances and accommodations for men's and women's travel by July 1, 1996.
- locker rooms by July 1, 1997.
- housing arrangements before home games by July 1, 1996. Currently, football and men's basketball players are housed in Ames motels the nights before home games, but women are not.
- secretarial support by July 1, 1997. The OCR found that no women's team had its own private secretary, while men's basketball and football teams did. Also, seven men's coaches — as compared to two women's — had private offices.
- recruiting budgets and opportunities by July 1, 1998. The OCR found that women's teams spent just 15 percent of the department's total recruiting budget.

Reid Crawford, the university's vice president for external affairs, says the OCR noted several Iowa State equity initiatives begun before its review started in 1991. After originally planning to field a varsity women's soccer team last fall, the university will take up the sport in fall 1995 (*see box*). The recently completed, $900,000 Hilton Coliseum addition provides equivalent offices for men's and women's basketball staffs. And this spring, construction begins on the $8 million facility near Cyclone Stadium that will house all coaches except basketball.

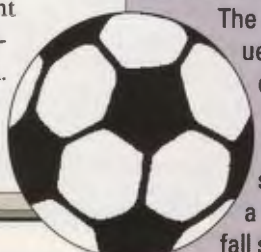
Crawford added that by next academic year, the breakdown of scholarships will reflect proportionally that of ISU's undergraduate enrollment — 58 percent men, 42 percent women. The ratio is currently 60-40.

Go-o-o-o-al

You probably didn't notice it was ever here or ever left, but women's soccer is back at Iowa State University.

Athletic director Gene Smith announced in spring 1994 that the university was cutting men's gymnastics and men's tennis and adding women's soccer. The motivation was partly legal — to comply with Title IX of the 1972 Education Amendments forbidding sex discrimination — and partly financial — the department was mired in a six-figure deficit.

The deficit bugaboo continues to burden Smith's department, but soccer is back. He says by summer he'll have a coach on staff who will put together a team in time to play a full fall schedule.



Wasn't that Jerry Van Dyke on tuba?

Until the as yet undetermined date when the ISU Marching Band follows the Cyclone football team to a bowl game, it'll have to be content with a trip to Hollywood.

Via celluloid, that is.

In January, Director Roger Cichy learned that he and the band had won "The Hayden Fox Band Bowl" contest sponsored by producers of the ABC sitcom *Coach*. The band's winning video was shot during halftime of the November Nebraska-Iowa State football game. The band played the *Coach* theme song and spelled "COACH" on Jack Trice Field — no, they weren't saluting the beleaguered Jim Walden, as many believed — while most of the 40,000-plus fans cheered on cue. "I think the producers liked that, the full stadium, the excitement of the crowd," says Cichy.

First prize is an MCA recording featuring the band's *Coach* theme on one side and a song of the band's choice — it'll be the *ISU Fight Song* — on the flip. Cichy says the band will receive at least 1,000 copies of the tape. Show officials will be on campus to re-record the song in C.Y. Stephens Auditorium this spring; the video will run under closing credits in the '95-96 season.

As for ISU fans, they undoubtedly hope it'll be the first and last time the band salutes a college football coach named Hayden.

No heavy metal fans, they're taking their experiment to outer space

THERE'VE BEEN SOME 70 SPACE shuttle flights in the program's 13-year life, but as far as Iowa State University is concerned, none have been quite as exciting as the *Endeavour's* launch this July.

Aerospace engineering Professor Laverne Severseike and about a dozen ISU students are joining with faculty and students at the University of Iowa to create an experiment that *Endeavour's* crew will perform. It's called IJEMS — the Iowa Joint Experiment in Microgravity Solidification.

Watch a spoonful of sugar settle to the bottom of your tea glass and you'll understand the principle behind IJEMS. Gravity has the same effect on solidifying metal — the heaviest components tend to sink to the bottom, creating weak spots. Because the shuttle orbits the earth unencumbered by gravity, metals cooling on board theoretically would form stronger materials.

"The stronger, more uniform you can make it, the lighter substance you can get by with," says Severseike. Researchers at Iowa are building the four cylinders that will hold the metals and the container in which they will be placed. ISU workers are constructing the housing for the entire structure as well as the mechanism that will be used to conduct the experiment. The metals will be cooled at four different rates.

Though space on the shuttle can go for as high as $100,000, a Houston aerospace firm is picking up the entire IJEMS tab.

Top magazine award helps ISU to *another* Sweepstakes

NINE AWARDS BY VISIONS MAGAZINE AND THE IOWA STATE University Alumni Association helped ISU to its sixth straight Council for the Advancement and Support of Education (CASE) District VI Sweepstakes Award for overall communications programming.

In addition to being named the top magazine in CASE District VI, VISIONS also won the following awards:

- first place, visual design;
- first place, photo series (Jim Heemstra's *Out of Focus*, Summer '94);
- second place, opinions/columns (*Ratings War* by Fern Kupfer and David Roochnik, Winter '94);
- second place, science/technology/research (Dan Davenport's *Fly in the Ointment*, Fall '93);
- third place, photography/news or feature (Heemstra's *Dove Tales*, Summer '94);
- third place, profiles/personality pieces (Davenport's *They Are My Heroes*, Winter '94);
- and third place, print advertising (*Still a Perfect Fit* series).
- The association also earned a third-place award in the visual design/special project category for its *That's the Game Plan* membership brochure.

STATE STATS - CLASS NOTES

- ✓ Mean undergraduate grade-point average, spring 1994: 2.74
- ✓ Mean undergraduate grade-point average, fall 1993: 2.69
- ✓ Number of academic years in last 10 in which spring grade-point exceeded fall: 10
- ✓ Men's mean undergraduate grade-point, fall 1993: 2.68
- ✓ Women's mean undergraduate grade-point, fall 1993: 2.74
- ✓ Number of colleges out of eight in which women's GPA exceeded men's, fall 1993: 7
- ✓ Percentage change in proportion of women in undergraduate population, 1985-94: +10
- ✓ Percentage change in proportion of students living in residence halls, 1985-94: -20
- ✓ Percentage change in proportion of students living outside Ames, 1985-94: +100
- ✓ Average ISU four-year graduation rate, classes entering 1984-1990: 21.8 percent
- ✓ Average Land-Grant 11 peer four-year graduation rate, classes entering 1984-1990: 27.1
- ✓ Average number of students in undergraduate classes, fall 1993: 33.3
- ✓ Average number of students in undergraduate business classes, fall 1993: 60.2

Source: Iowa State University Office of Institutional Research

Vigilant against another great fall

VISIONS LIKENED VEISHEA to Humpty Dumpty in its Spring 1993 cover story, posing the critical question: *Can We Put Veishea Back Together Again?* We — more accurately, ISU students and administrators — did. Veishea 1993 and '94 were monastery quiet after the '92 riots left the campus community struggling to repair its beloved, if woefully scrambled, event.

"We have not forgotten what has happened before," says junior Jill Robertson, a Veishea public relations worker helping plan the April 21-23 event. "We can't be responsible for everybody in town, but we can be proactive in our planning."

After Veishea violence debuted in Campustown in 1988, students got similarly serious and saved their beloved event. But after four years — literally a student's campus lifetime — the riots returned.

This year, students' resolve to prevent another recurrence manifests itself in several ways. Veishea '95 applied for and received Government of the Student Body funding to conduct risk-management workshops before and during the event. Veishea will again use peer security officers to work with Ames police and ISU Department of Public Safety personnel to keep the streets quiet.

Organizers also looked to the past in choosing a focus for Veishea '95. Just as the celebration's 1994 edition centered on vaunted alumnus George Washington Carver, planners this year chose famed suffragist and 1880 Iowa State graduate Carrie Chapman Catt.

VEISHEA
PATHWAYS TO PROGRESS

This year's planners aren't re-inventing the entire weekend. Open houses — once the heart of Veishea — again will be pushed as the weekend's centerpiece. The Taste of Veishea food court again will be held into the wee hours of Friday and Saturday nights on Welch Avenue, the site of previous rioting.

The parade again will begin later in the day — at noon — followed by the spring football game's return to Veishea.

Social Woes

IOWA STATE'S SOCIAL WORK PROGRAM NEXT YEAR WILL MARK the 20th anniversary of its initial accreditation in less than joyous manner — by losing that accreditation.

In February, the Council on Social Work Education's Commission on Accreditation rejected the program's appeal and thus said it would not continue accreditation beyond July 1996. The commission in November had informed the program that it had ruled against granting continuing accreditation.

The program employs two full-time faculty members and serves about 120 students. Coordinator Stephen Aigner says the program had the equivalent of more than three full-time faculty members when it last was accredited in 1985. "We would need more people, more bodies," to regain accreditation, says Aigner. He says he is combing the university for solutions — sharing with the Department of Human Development and Family Studies, for example. Social work currently is part of the Department of Sociology.

Though it can continue without accreditation, Aigner says the loss will severely hamper his ability to attract students. A degree from an accredited institution is not required in Iowa, but Aigner says about two-thirds of the states do require it. "An unaccredited social work program is an embarrassment to the university." says Aigner, adding that he would need an additional $80,000 per year — the current budget is about $140,000 — to allow the program to regain accreditation.

Juniors and seniors currently enrolled will be allowed to receive accredited degrees.

- Also in February, the College of Liberal Arts and Sciences announced that it is considering eliminating the speech communications department and distributing its courses and majors in other university departments. LAS Dean Elizabeth Hoffman estimates the move could save her college up to $100,000 in administrative costs. She insists the move would enhance, not diminish, the university's ability to offer speech courses and majors to students.

Wanted: Roommate stories (*Pretty please?*)

Maybe members of Iowa State University's Alumni Association are inherently shy. Maybe they're too busy. Maybe the 32-cent stamp scared them away.

Whatever the reason, you avoided VISIONS' appeal for roommate stories (*Fall 1994*) like an 8 a.m. class.

So, with a special thanks to all those who did respond — way to go, you three — we're giving it one last chance. Jot down your favorite, funniest, most embarrassing and/or most lasting roommate memory and send it to VISIONS editor, Alumni Suite, Memorial Union, 2229 Lincoln Way, Ames, IA 50014-7164. If it really was that stamp thing that stood in your way, you can fax your prose to (515) 294-9402 or e-mail it to colson@foun.adp.iastate.edu.

Image is Everything

UPSTART ISU-GENERATED FIRM VISUALIZES STUNNING SUCCESS IN COMPUTER ANIMATION

THIRTEEN WAS A MOST unlucky number for Frank Olson. On Nov. 28, 1953, the Central Intelligence Agency scientist plummeted to his death from his hotel room on the 13th floor. After a lengthy investigation, the CIA declared Olson's death a suicide and closed the case.

Forty-one years later, a go-go Ames computer visualization company housed in Iowa State University's research park helped re-open it. Relying on technology available only at Engineering Animation Inc. and a handful of other companies around the world, renowned forensic scientist and ghost-chaser James Starrs says the CIA's Olson may have been helped out that window.

It's just another in a string of press-grabbing projects cranked out by the rapidly growing company.

Started in a university office five years ago by mechanical engineering Professor Martin Vanderploeg and then-graduate students Jay Shannan and Jeff Trom, EAI now has more than 120 employees — about half ISU graduates. Hiring more than five employees per month, it's on the verge of blowing the doors off its four-suite complex in the ISU Research Park south of campus. So concerned is the city of Ames that the $5 million a year company might relocate that it has begun assembling an incentive package, possibly including a new building.

Though Vanderploeg (*VAN-der-plow*) says virtually all of his competitors work on either coast, staying in Ames is appealing because of the contact with the university. (EAI does have sales offices in Chicago, Los Angeles and New York.) The university helped Vanderploeg create Engineering Animation's flagship computer technology, VisLab. Using this unique software and computers produced by 1966 ISU graduate Ed McCracken's firm, Silicon Graphics, EAI created a computer model of Frank Olson's smashed skull to ensure that the body Starrs exhumed last summer truly was Olson's. Then, using measurements of the hotel room and sidewalk and information about the body positioning, EAI's computer animators projected trajectory information about how Olson fell. With Engineering Animation tape and VCR in hand, Starrs presented his hypothesis last November in a speech at the National Press Club in Washington, D.C.

EAI's meteoric lifespan has been little more than a series of such cases — for which clients pay up to $150,000 — including:

• **The Case of the Missing Beard.** In December, the company made perhaps its biggest national splash with what actually was one of its smaller jobs. An ultra-orthodox rabbi, Shlomo Helbrans, was convicted of kidnapping and sentenced to a New York state prison. To meet state requirements, Helbrans was to be photographed clean-shaven.

COMPUTER IMAGES COURTESY ENGINEERING ANIMATION INC.

EAI showed how Frank Olson departed his hotel room (*left*), and used a model of his skull (*above*) to verify ID.

EAI "shaved" the rabbi (*above left*), and took Houston museum-goers to the planet's first days (*above*).

Yet he had appealed that rule because of his religious beliefs. "Ye shall not round the corners of your heads," says Leviticus 19:27, "neither shall thou mar the corners of thy beard." Desperate to protect his client, the rabbi's attorney called EAI. The company immediately dispatched a staff member to New York's Rikers Island Jail, where Helbrans was held. The woman photographed and sketched the rabbi's head, and used calipers and a ruler to measure anatomical landmarks. She scanned the photos into a computer and, using VisLab, produced an image of the rabbi *sans* whiskers. Prison officials promptly viewed the images in federal court and ruled them acceptable. The case — covered by major media from coast to coast — may set precedent in allowing computer-generated images to substitute for actual photos.

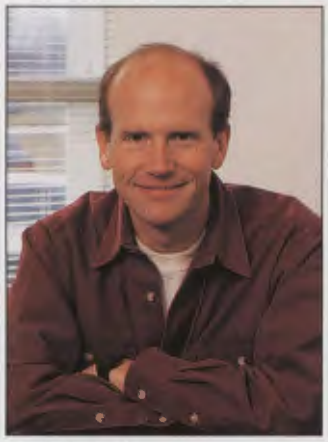


PHOTO BY JIM HEEMSTRA

Martin Vanderploeg

• **The Case of the Big Bang.** Also last fall, the Houston Museum of Natural Science hired EAI to produce a stunning film, *The Origins of Energy*. The three-minute project lets viewers "fly through" the creation of the universe. It debuted in October on a bank of 18 40-inch video monitors in the nation's fourth most-attended museum.

• **The Case of the Flaming Complex.** In 1993, EAI received one of its most severe challenges. As David Koresh's stand-off with authorities outside of Waco, Texas, grew more intense, the CBS-TV affiliate in Dallas sought Engineering Animation's help in bringing the story to its viewers. Providing EAI with photos and sketches of Koresh's compound, the station asked for a film that would allow viewers to "fly through" the buildings. The station wanted the film in five days — a deadline that required EAI to devote most of its computer- and brainpower to the project nearly round the clock. After Dallas' initial airing, CBS and other affiliates around the country picked up the video.

Though there are hundreds of other computer visualization companies, Vanderploeg says few — if any — possess EAI's combination of computer and human capability. EAI recently began marketing its VisLab software, with a percentage of the sales going to the university under a royalty agreement.

Shannan, Trom, Vanderploeg and a dozen other EAI employees have PhDs, with another eight owning master's degrees. Because of a recent push into the medical and pharmaceutical fields, the company now employs two biomedical engineers and two medical illustrators. It recently completed a film called *Body Riders* that followed a pill from the mouth to the bloodstream to its attack on a strand of DNA. "That's the fastest-growing segment of our business," Vanderploeg says.

That's a switch from five years ago, when EAI focused on litigation work. Animation is particularly powerful in courtrooms to show jurors, say, how an automobile accident occurred or how a body of water was contaminated. Rumor has had it that EAI was being considered to provide animation for use in the O.J. Simpson murder case — perhaps to show how DNA testing works or to recreate the murders — but Vanderploeg refuses comment.

But he can say that EAI will continue to entrench itself deeper as a national and world leader in technical animation. "No production house has the engineering focus we have," he says. "We're not going to California to try to wrestle the contract for *Terminator 3*. We know what we do best."◐

RAISING

It's right out of *The Twilight Zone*: Turn-of-the-century farmer awakens in his Iowa cornfield after a 100-year slumber. Giant tractors growl across the black earth. Computers monitor livestock feeding systems. Farmers plant by satellite, inseminate sows via mail order and annihilate weeds with elixirs of wonder chemicals.

BY DAN DAVENPORT

A STINK

Our bewildered Rip Van Winkle has been rendered a virtual outlander on his own back 40.

Until he draws a breath.

Only then will he find comfort in knowing that there's at least one law of nature humankind has yet to repeal: Manure stinks.

PHOTOGRAPHS BY JIM HEEMSTRA

Since time immemorial, nobody seemed to mind. S--- happens, the bumper sticker cracks. Thirty, even 20 years ago, all but the softest city slicker could suck in a snootful of pungent country air and say with a chuckle, "Ah, the smell of money."

Lately it's the smell of acrimony.

Particularly hog smell. Particularly in Iowa, bacon supplier to the world. With startling frequency, neighbors and long-time loin devotees no longer laugh off odors piped out by little piggies down the road.

Why all these sensitive schnozzes now, after hog poop has stunk up rural America since well before McCormick was turning soil?

Fear.

To many, Iowa's first-in-the-world pork industry is drifting toward an iceberg. Odor symbolizes the tip — the most noticeable segment, but hardly the most potentially destructive. The real menace lurks beneath the surface: Revolutionary change threatening to crush a 400-year-old foundation.

According to the U.S. Census of Agriculture, the number of Iowa hog farms declined from more than 150,000 in 1954 to fewer than 29,000 last year. Meanwhile, the number of hogs in the state climbed from 12 million to more than 14 million. Yes, more than two-thirds of all hog farmers still own fewer than 100 hogs. Yes, corporations raised just 16 percent of the 100 million U.S. hogs slaughtered in 1994.

And yes, the numbers reflect good times for Iowa pork (hog prices' recent plummet below $40 per hundredweight notwithstanding). Iowa more than doubles the production of its nearest rival, North Carolina. The Iowa Pork Producers Association says the industry provides the state with 93,000 jobs and $12 billion annually in economic output. Each American eats two more pounds of pork per year than in 1990. The 1994 General Agreement on Tariffs and Trade is expected to increase pork exports to Europe as much as six-fold by 1999.

But if you have even a hint of clay in your five-buckles, if you lack the pluck or the bucks, the earth is shifting. North is south. Large-scale hog farming is on the verge of explosion — set to dominate a majority of the market within a decade, says one economist. Family farmers, feeling the walls close in, fearing the loss of not just income but a way of life, have drawn what could be one of their last viable weapons:

The slippery brown stuff they've scraped off their boots all these years.

"As an issue, I'm not so sure [odor is] even in the top five or six," says Jerry Hatfield, director of the federal government's National Soil Tilth Laboratory on the ISU campus. But practically speaking, it's the *pièce de résistance* — as Hatfield too well knows. He's waist deep in a brouhaha over a research facility near Madrid *(page 17)*.

Groundwater pollution, with the potential to affect a much larger population, would figure to be a greater concern. But its cunning ability to work its ill drop by drop — conveniently beneath the earth — makes it a poor flashpoint.

But ah, *ode de porcine*. Which arches your back more quickly: The *possibility* that fish in a nearby stream could be poisoned, or the *fact* that opening your kitchen window scratches your eyes like sand and throws your lunch into reverse?

"It's in your face," says Nancy Thompson, attorney for the Center for Rural Affairs in Walthill, Neb., which works feverishly to preserve family farming. "If it stinks, you want it to stop — now."

Adds Paul Lasley, an ISU extension sociologist and director of the highly regarded Iowa Farm Poll: "We've had feuds for years. Now, the Hatfields and McCoys are trading guns for hog manure."

Some of these feuds are playing out in courtrooms, others in less seemly manners. Either way, the stink hardly is bringing out the best in Iowans.

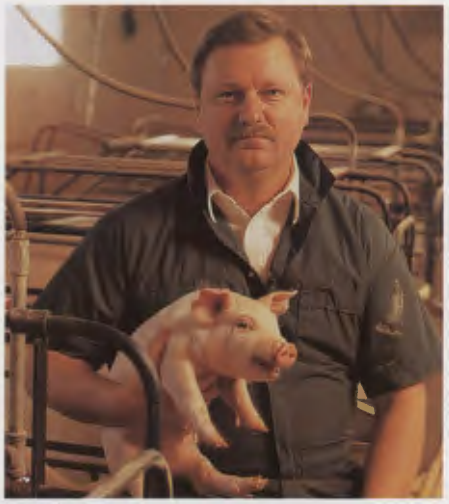
A black cloud swirls over the Other White Meat.

As Iowa State University's director of government relations, Carol Bradley is paid to know what Iowa's lawmakers know before they know it. And like her colleague Lasley, she is not prone to wild overstatement. When she tells you the 1995 Statehouse rancor over odor will finish a close third to a pair of emotional volcanoes — the death penalty and minors' parental notification of abortion — you gain a sense of the gravity.

In patching together a set of pork-industry regulations after VISIONS' March press run, legislators had to balance polar views represented here by:

•**Big producers.** "In two years, we've added 200 jobs averaging $24,000 [per year]," says Chad Hagen, director of nutrition and finishing operations for Iowa Select Farms, Iowa's largest producer. "We could put jobs in Oklahoma just as easily."

•**Small producers.** "We aren't opposed to pork production," says 66-year-old Blaine Nickles, a retired Clarion hog farmer and member of the year-old



Gene Barrick

Organization for the Protection of the Environment. "But this concentration is changing our quality of life."

Expectedly, Iowa's land-grant institution is being called upon by both sides to shed unbiased light. Thus Governor Terry Branstad last April tabbed Iowa State's College of Agriculture dean, David Topel, to chair the Environmental Agriculture Committee. Topel's charge: Assess concerns and make remedial recommendations. Topel handed his report to Branstad last December. Conversations with legislators reveal that the General Assembly was likely to focus on:

•Tightening manure handling regulations.

•Lengthening minimum "setback" distances from neighboring homes.

•Requiring submission of manure management plans to the Department of Natural Resources (DNR).

•Earmarking portions of DNR permit fees for indemnity funds to pay for clean-up of bankrupt hog farms.

Notice no mention of odor per se? There's a good reason: Science has yet to develop an accurate measuring system. What makes one man retch might be a minor irritant to his neighbor across the road. "You can't regulate odor," says ISU's Lasley.

Topel, like Lasley, is a reserved erstwhile farm kid, more than 30 years off a Wisconsin grain and dairy operation. He knows the smell of manure, and the strains tugging at rural America. Anxious producers and watery-eyed neighbors flocked like swallows to his committee's five forums. Those with odor-related disputes took the opportunity to vent their frustrations — worries flamed by an 8-month-old market depression. "I understand these frustrations," Topel says in an interview in his Curtiss Hall office.

Forty years ago, his predecessor walked a mile-wide path. Few of Iowa's 150,000 hog farmers had more than 100 sows. Since the '70s, that line has narrowed to a hair's breadth. Though still the majority, small operations increasingly are rivaled by producers like Gene Barrick. The 1972 Iowa State animal science graduate's Swine Graphics Enterprises in Webster City owns 14,000 sows, making him the second-largest producer in the state. If Iowa State serves Barrick, can it serve Blaine Nickles' ilk?

That objective, land-grant ISU should or should not hold jurisdiction is moot. It does. Yet Topel adamantly denies he provides anything but ecumenical support. "The university does not — must not — cannot — recommend anything," he insists. "Many, many people try to twist that around."

Critics say the university helps the big producer by focusing research on big operations. Successful Farming columnist Cheryl Tevis went so far as to write last September that land-grants shouldn't even research smell. To do so, she wrote, is to create a more corporate-friendly environment.

Topel's critics don't stop at campus boundaries. Mike Duffy, an ISU extension economist and associate director for the Leopold Center for Sustainable Agriculture, says flatly that the university does favor big. "We need more of a social conscience in our research," says Duffy, adding, only half-jokingly, "I haven't sold my soul yet. I don't have Tyson stamped on my forehead." He refers to chicken giant Tyson Foods, which is making huge

GOOD SCIENCE OR FOUL PLAY?

There's more than a whiff of irony swirling in the air over a 710-acre parcel of land southwest of Ames.

If you're of the opinion that Iowa State University should research pork production — including the odious smell it creates — it's ironic that beneficiaries of such work are steamed over a proposed 600-sow facility. If you think ISU is sleeping with the enemy — large hog producers bent on ruining family farmers — it's ironic that the university is mired in the very muck it wants to help producers avoid.

ISU and the U.S. Department of Agriculture hope to make the Boone County tract home to the National Swine Research Center. After meeting stalwart grassroots opposition for more than a year, the $26 million project faced a new obstacle in late February: Republican lawmakers' Contract With America. On Feb. 22, the U.S. House of Representatives Agriculture Appropriations Subcommittee voted to rescind $12.5 million already allocated to the project. USDA officials immediately postponed their plans to begin construction on the campus laboratory building this spring; they remain cautiously optimistic that the rescission won't survive full appropriations committees of both the House and Senate. "It's not over," says Richard Dunkle, director of the USDA's Midwest Area Agricultural Research Center in Peoria, Ill. "There's a long way to go."

Should the money be restored — and the remaining $13-plus million be added — Dunkle hasn't forgotten that other foe perhaps even more relentless: local opposition. Calling themselves the Boone and Polk County Big Creek Environmental Protection Group, they say the operation not only will foul the air, but it will pollute Big Creek and Saylorville Lake. Their rallying symbol is the 125-year-old Garden Prairie United Church of Christ across the road from the farm's northwest corner.

While stressing, "We'll be good neighbors," Jerry Hatfield, director of the USDA's National Soil Tilth Laboratory on campus, acknowledges complaints that ISU improperly irrigated liquid manure directly onto the soil at another Boone County facility. And yet another university farm was ordered in January by the Iowa Court of Appeals to pay $10,000 in damages to two neighbors who claimed the operation's open waste tank had caused them distress. "Manure will be handled properly," Hatfield says.

Residents aren't so sure. "These people don't understand," says Susan Rinker Nowels, a 1976 ISU graduate who lives with her husband and two daughters on a farm closest to the proposed site of the manure storage lagoons. "They're not dealing with people who can pick up and move if the smell gets bad. I grew up on this farm. My grandfather owned it. My roots run deep." Nowels says she's "never been politically active," but that the proposed hog operation has her feeling "like a mother bear. My home and family are threatened."

While neighbors are understandably distressed about the farm's location, scores of Iowa farmers and activists decry its size. Because it will produce upwards of 12,000 pigs per year, they say taxpayers' millions will be used to aid only mega-operators — thus inflicting further damage to the family farmer.

Hatfield disagrees. "We won't have 600 sows all in the same type of system," he says. "The numbers can be scaled to any operation. We won't cater to size. That message is lost on that group."

Mike and Sue Nowels, their daughters, Natalie, 9, and Lisa, 8, and their beloved church.

Says Mary Todd, another area resident: "Iowa State is a fantastic university, and I know the importance of hogs. I just don't believe they have a right to come in and ruin our lives. ... They're adamant to put it here, we're adamant they won't. It will be quite a fight."

On more than one front.

—D.D.

Where's a big can of Lysol when you need it?

Because the pork industry's movement toward large farms — "hog factories" is the pejorative term — has been so rapid, scientists are playing catch-up in providing effective, economical solutions to the hog odor conundrum. Dwaine Bundy, an Iowa State professor of agricultural and biosystems engineering, says he and other researchers are focusing their efforts on:

•Covering storage facilities, either with man-made materials such as plastic or some sort of biomass.

•Spraying a chemical in the air over the manure storage unit that can interact with the offensive compounds and reduce odors. Some of these experimental units have mechanisms to start the spray when the wind is in a specified direction — thus likely to blow odors to a neighbor's home.

•Anaerobic digestion. Civil engineering Professor Richard Dague has for years been studying ways to use bacteria to convert organic material to methane, an odorless gas. At a farm in Colorado, Dague is using a U.S. Department of Energy grant to build a facility that will flush waste into a closed container in which the methane conversion occurs. "You flush your toilet, don't you?" Dague says. "The key is to flush it out and convert it."

•Liquid/solid separation. Not only can this reduce odor created during application, but it also enables producers to more easily sell solids for fertilizer.

•Manure additives. Kiln dust is one of the most commonly used. Others include a variety of enzymes and microbial products.

•Adjustments to feeding systems.

•Plantings. Trees and shrubs can help diminish the wind's ability to spread the stench.

—D.D.

strides into pork. It was the country's No. 4 producer last fall, but reportedly plans to leap to 160,000 sows by 1996.

If Duffy is lone wolf in prodding ISU to balance its research agenda, he's in a Leopold Center pack regarding the unsustainability of hog-only farming. Speaking at an Iowa Pork Producers' Pork Improvement Group (PIG) seminar at an Ames hotel in January, ag biosystems engineering Professor Stewart Melvin said flatly that the production of huge numbers of hogs on small farms is not sustainable practice. Handled properly, he told the sea of flannel and winter beards, all the nation's hog waste could safely be applied on Iowa soil. But he says too many operators see manure only as a smelly nemesis and potential Exhibit A in the courtroom. Thus he says this "cost" often is passed on to unsuspecting citizens and ecological systems.

Gene Barrick doesn't have a big eye in the middle of his forehead. His ears aren't pointed. No blood drips from his lips.

He simply owns 14,000 sows. And every one of them — and the 280,000 pigs they will produce in a year's time — stinks.

Estimates vary widely, but one ISU professor says a market-ready hog can produce as much waste as 10 humans. By conservative estimates, Barrick's porkers will produce as much waste in a year's time as a city twice the size of Des Moines.

That's cause for many to grant him monster status. An ogre not satisfied with making millions but intent on shattering the sparse remnants of Iowa's idyllic lifestyle. Without mentioning names, Duffy says the industry is moving toward huge operations "because certain people stand to make millions. As long as the good people don't say much, that will continue."

Barrick understandably resents being cast opposite Good in this drama. He grew up on a small family farm. He spent years not raising hogs but serving as an information source for other farmers (thus the curious name, Swine Graphics). "But I finally got the message," Barrick says from SGE's stylish offices in Webster City. His are the trappings of the '90s hog farmer: blaring speaker phone, fax machine humming, two young men filling out job applications at the receptionist's desk.

"I like small farms," he continues. "Love 'em. They can succeed, but only if they are willing to act like a business. Many aren't. … As long as this economy is based on capitalism, whoever delivers the best goods is going to win. The others are going to get run over."

Barrick and Duffy agree that big shouldn't be equated to efficient. Duffy points to studies showing no significant economies of scale above 200 sows. Yet confinement facilities do farrow more pigs per sow — 20 per year as opposed to 14 in most small, traditional operations — produce leaner hogs and have fewer disease problems. Sonny Faison, president of the country's No. 2 pork producer, Carroll's Foods of North Carolina, says 60,000 sows are required for real efficiency.

Those fighting for the family farm, people like 1974 ISU graduate Barb Grabner, leap to point out what they say are unfair advantages gained by the big: Access to better markets, government subsidies and tax breaks. Grabner, assistant director of the farm activist organization Prairie Fire, says it is in those areas — and not those addressed by Topel's task force — that real solutions lie. Prairie Fire also is pushing to place more control of hog operations into the hands of local officials.

Grabner hopes odor jolts the state into realizing that a landscape dotted by small farms — not one mammoth operator — represents all that rural Iowa once was and can again be. But as surely as millions of tons of topsoil have been washed to the Mississippi, erosion of this lifestyle cannot be reversed. Shuttered schools and ghost town Main Streets will not be re-opened. But curbing the erosion poignantly rampant since the '80s Farm Crisis — that is Grabner's mission.

She insists she's not trying to force a choice between "two extreme negatives." But large producers, economic development specialists and the National Pork Producers Association say there are just two choices: More big pork operations or no pork operations. As he talks in his Iowa Falls office, Iowa Select Farms' Hagen points out recently received parcels — economic development videos and booklets — from Texas and Alabama. Establishing more regulatory hoops, he says, only will grease the industry's migration the way of Tyson — to North Carolina, to the South, to the West.

In a scathing January Des Moines Register interview, IBP Chairman and

Chief Executive Robert Peterson condemned any effort to hobble mega-producers. "We've got to leave the buggy and the horse behind," he said. Peterson is particularly incensed that Iowa law forbids "vertical integration" of the industry by barring meat packers from raising hogs. He demands that lawmakers keep control from local officials, limit environmental regulations and give producers more protection from lawsuits.

"If we shut the door on pork," says 1986 ISU animal science graduate Jeff Schnell, field director for the Iowa Pork Producers, "we shut the door on jobs." He says Iowa's breeding stock dropped by 18 percent from 1993 to 1994, while North Carolina's took a 25 percent jump.

Item: In January, Carroll's Foods of North Carolina, citing local protests, decided not to build a 2,400-sow operation in Iowa.

Item: In 1989, furious local reaction was almost solely responsible for Premium Standard Farms being denied construction permits for a 4,800-hog complex near Ledges State Park. The firm took its operation to Princeton, Mo., where it employs 1,500 people.

Schnell does not mince words: "This is crunch time for Iowa."

A growing number of Iowans are putting the crunch on producers by stealing a page from Doug Llewellyn: They're taking their malodorous neighbors to court.

Dennis and Ruth Wienhold of rural Newell in northwest Iowa saw no other means of relief. In 1992, they filed suit against Norman and Pam Wolff's 800-hog confinement some 2,200 feet south of their home. In the ensuing three years, farmers across Iowa have watched the suit as closely as a thunderhead banking up in the western sky.

The Wienholds say life became unbearable after the Wolffs began filling their hog facility and its 500,000-gallon sewage lagoon. In fall 1991 — a year after beginning operation — the Wolffs gained "agriculture area" designation from the Buena Vista County Board of Supervisors. Referred to as "the right to farm act," Chapter 176B of the Iowa Code was written in 1982 to protect farmers from municipal and commercial encroachment. It since has been used to shield farmers from nuisance suits.

But a district judge ruled that, in earning the designation after they had begun operation, the Wolffs essentially had closed the proverbial barn door after the hogs were out. He ordered the Wolffs to pay $22,500 to each Wienhold. James Pugh, a West Des Moines attorney representing the Wolffs through ties to the Iowa Farm Bureau, says the Wolffs' appeal will take most of 1995 to crawl through the Iowa Supreme Court.

Residents like former ISU student Clyde Cole of rural Randall and his wife, Becky, hardly begrudge the Wienholds' victory. Since last August, the Coles and dozens of others have fought like terriers a new Iowa Select facility. Becky Cole is preparing for a long summer, when she says the southerly breeze will carry the foul odor the three-quarters of a mile to her home. "Our life is dictated by the wind," says Cole, who has lived in her home for 22 years. "Some days you can't sit in the yard, hang clothes, anything."

Iowa Select's Hagen says the facility is environmentally benign, that some neighbors haven't complained. "We want to be a good neighbor," he says. "But some [non-farmers] move to the country for an idyllic lifestyle and won't tolerate any odor."

Mike Thompson, executive director of Iowa Mediation Services, hears six similar cases per month — up from a case per month two years ago. He says across the countryside, neighborliness is giving way to litigiousness. "For years, Iowa and rural America avoided it," he says. "Odor may not allow that to happen much longer."

Hatfields and McCoys agree it's a woeful commentary when the Judge Wapners hold sway over an industry — a way of life — that dominates Iowa history like no other. But that is the slippery slope on which Iowa pork is perched. There is no going back; ahead on this path lies a three-pronged fork:

- 1. Maintain current hog populations by keeping a balance of small and large farms.
- 2. Maintain current numbers in larger and larger chunks.
- 3. Lose industry share. This is no option. Nobody wants to be blamed for losing pork.

If hog manure smelled like honeysuckle or Eternity, the choice perhaps could've been postponed for years. But as sure as the summer breeze streams out of the south, s--- happens. And there's more than the acrid bite of ammonia riding the wind. In 1995, the smell of fear is wafting through Iowa's hog industry like never before. ◐

Smell a rat? Blame it on Darwin

One of the country's leading authorities on smells' effects on the body says it's no coincidence that hog odor elicits such visceral reactions in some downwinders.

The very part of the brain that governs smell — the limbic system — also processes emotional information. "All the early [human's] cortex had to do was smell," says Susan Schiffman, professor of medical psychology at the Duke University Medical Center. "Throughout the animal kingdom, smell determines what you eat, whether you mate, everything. There are primitive factors at work here."

Schiffman, who receives up to 30 hog-odor calls per week at her office in Carolina hog country, says odor as powerful as that created by hog feces can be absorbed into the lungs, the bloodstream, even fat stores. "You constantly bring it back out and smell it," she says.

Schiffman says her research has shown that, in addition to being a major bother, odors created by hog operations can cause numerous physical and mental ailments, including depression.

—D.D.

CHU

ISU answers the $1 million question: Yes, teaching Catholicism is part of the land-grant mission

BY DAN DAVENPORT

ILLUSTRATION BY MARK MASTUBELLO

Sit down with a group of Catholics launched into a bottomless deliberation into their faith — as is their wont — and in time you'll see one of them put their thumb and forefinger about an inch apart and say, "That's a real catholic thought — catholic with a small *c*."

It's not unlike the way political pundits might explain one of their own initiatives as being remarkably democratic — small *d*.

At Iowa State University, academics and clergy alike are undergoing their own cavernous dialogues about a would-be $1 million endowed chair in Catholic studies. That's Catholic with a big *C* — but officials stress that its mission assuredly will be rooted in the small *c* definition.

"We're hoping to provide a kind of richness, an extra dimension for the kind of scholarly activity that ought to go on at a university," says Provost John Kozak, a major supporter of the chair. "I see this as a wonderful opportunity to broaden the base of opportunities for all."

That is, broadened opportunities for a catholic — universal — campus community.

But this being the state's land-grant institution, Kozak and others are well aware that offering programs in Catholic studies could strike taxpayers as slightly more curious than, say, a chair in ag biotechnology. Few topics quiet a room more quickly than religion. And few doctrines are more engrained in the 200-year-old American psyche than separation of church and state.

Potentially adding to the confusion is the name of the proposed chair: The Msgr. James Supple Chair of Catholic Studies. In his nearly half-century at St. Thomas Aquinas Church across Lincoln Way from the Memorial Union, Supple arguably has left as deep an imprint on student life

RCH and State U.

as any non-university figure. He received an honorary doctorate in 1980. It is in his name that the university and the church are teaming up to raise the $1 million endowment. It is in his name that, come 1997, the university will hire a permanent professor of Catholic studies.

But it is not in his name — nor in the name of any priest, bishop, cardinal, pope or altar boy — that the university will discuss Catholicism.

"To practice some religious tradition — to proselytize — is not only unconstitutional, it's unjust to all the taxpayers of the state," says Gerard Sloyan. The Catholic priest and internationally renowned New Testament scholar is on campus this spring as a visiting professor of Catholic studies — the warm-up act to the permanent professor in the Supple chair, if you will. His position is funded by an existing $1.4 million St. Thomas endowment in Supple's name. The 75-year-old Sloyan has taught and administered religious studies programs for 40 years — first at the Catholic University of America in Washington, D.C., and later at Temple University, a public institution in Philadelphia. The erudite Sloyan is teaching — not preaching to — two packed courses this semester.

"If a university is a place for universal learning, then, in principle, nothing is prohibited so long as it is the subject of academic treatment," he says. The Supreme Court says it's so. Though it ruled more than 30 years ago, in a case involving a Minnesota school district, that public schools can't integrate prayer into the school day, it took pains to add that teaching about religion did not cross Constitutional boundaries.

Iowa taxpayers may be surprised to know just how deeply rooted that conviction is in their own state. The University of Iowa long has claimed that, in 1927, it created the country's first public university school of religion. A 1954 Iowa State document states that the college in Ames tried to imitate its sister school's efforts, with little success. Whereas the University of Iowa leaned heavily on a $100,000 grant from the Rockefeller family, ISU simply ran out of cash. Today, Iowa has 15 religious studies faculty members, boasts about 2,000 students and is one of only a handful of state universities giving doctorate degrees in religious studies.

Despite such impressive precedent just a couple of hours' drive to the east, despite their constant vigilance over their missions to remain true to the spirit of their study and coursework, Sloyan and his colleagues know each semester will bring with it a new set of raised eyebrows — from Catholics' to Jews' to Islamics' to atheists'.

"It should tell us a great deal about ourselves that programs like these raise eyebrows at all," says philosophy Professor Gary Comstock, former head of ISU's modest religious studies program. "What it should tell us is that, while we are one of the most religious nations on earth, we tend to think that religion is a very private affair, that it shouldn't be discussed in public.

"We don't have a particularly good public language for talking about our religious beliefs and values. That's why this is such a big step for a place like Iowa State — it will cause people to think about religion in a different way."

Elizabeth Hoffman, dean of ISU's College of Liberal Arts and Sciences, felt strongly enough about that possibility to save the entire religious studies program from the chopping block upon her coming to campus in July 1993. LAS's previous interim dean hadn't seen religion as central to either the college or university mission. He was moving the program toward elimination, despite the fact

that its courses were amazingly popular — Sloyan's two courses turned away as many students as it accepted this spring. Other previous religion courses also have been routinely oversubscribed.

"We are talking about the very fabric of so many societies throughout the history of the world," says Hoffman. "Religion is a central part of so many peoples' lives, their society, their culture, what they eat, how they dress, who they consort with. It is absolutely fundamental, yet, we hardly pay attention to it at our academic institutions."

In that sense, it is irrelevant that the church across the street from campus brought its plan to Hoffman. Or that the chair will be named for the most highly recognized priest in Ames' history. Or, for that matter, that more than 6,000 Catholic people are enrolled at Iowa State. What is relevant, Hoffman says, is that Catholicism has been a powerful force in shaping development of the world for two millennia. Presenting it as a constant force of Truth — certainly the belief of many of those 6,000 students — is not the intent of a bona fide Catholic studies course.

Though Hoffman says it is coincidence, as of February she had hired a professor to begin offering new courses in Islamic studies by this fall. The university also is making preliminary efforts to bring a Buddhist scholar to campus.

What a marked departure from ISU's religious roots. Though it was a state-supported institution from its 1858 inception, the original

JIM HEEMSTRA

GERARD SLOYAN

Iowa State College — as did practically every higher learning institution of the day — had a heavily Protestant foundation. There were no churches near campus for Iowa State's first 50 years, thus the college assumed significant responsibility for students' religious lives. Under the title "Public Worship" in the Iowa State College Catalogue for the Year 1885, the college informed students that, "On Sunday afternoons a discourse is given in the chapel by the President, one of the professors, or a clergyman invited for the occasion. The object of these sermons is to emphasize and enforce the principles of the Christian religion."

As the college grew, the president took on other administrative duties and local churches filled the void. In 1929 the college substituted Sunday evening services for morning church. In 1948 services were discontinued altogether because of lack of attendance. The university has grown only more secular in the succeeding five decades.

'WE ARE TALKING ABOUT THE VERY FABRIC OF SO MANY SOCIETIES THROUGHOUT THE HISTORY OF THE WORLD.'

—Liberal Arts and Sciences Dean Elizabeth Hoffman

Certainly it has not set out to reverse that trend with the Supple chair. Indeed, Supple himself is content to let the university handle the critical inspection of all religions and handle himself the preaching and proselytizing of the Catholic faith.

"I look at it as sort of a university version of the way I've done weddings at every church in town," Supple says from his office at St. Thomas. Indeed, it's doubtful that many sailors have tied more knots than the man known by many as "James from Ames" *(see essay, page 23)*. And it's equally unlikely that a single one of those betrothed would pause for a second to recognize the now-83-year-old elf. He still wears the collar, of course. Still has the caterpillar-like eyebrows perched above the quirky half glasses. He's stayed with these specks all these years, he says, simply because "I still don't need bifocals so I don't want to look through glass to read." And of course he still wears that radiant grin, the one that tells listeners he's just about to embark on yet another of his legendary jokes. Corn pone and Catholicism are alive and well at St. Tom's.

"I think to look at religion — any religion — every religion — at an academic level will only raise the whole level of all religion," Supple says. "It isn't just to help us Catholics here at St. Thomas. That's our job."

Supple's job since 1947 has been to build a parish from scratch, starting with "just a junky old house" at a time when ISU had about 1,000 Catholics. He later built a student center and then the current church, in 1962.

"I like to dream," Supple says, in a proclamation that will surprise none of the thousands of alumni touched by his beneficence the past 48 years. "But I never would have dreamed that some day, we'd be sitting here talking about having classes in Catholicism at Iowa State University.

"I guess they're right: God is a God of surprises." ◐

Father Knows Jest

BY ROY REIMAN

Father Supple quickly and permanently changed my definition of "priest" shortly after I arrived at Iowa State.

I'd grown up in a small, rural Catholic parish headed by a very rigid pastor who delivered sermons from high on the pulpit long after most other priests had taken the more conversational approach at the altar rail. He was a good man, but far from warm and friendly. I never even knew his first name — he was always "Father Kramer."

Imagine, then, my shock when I arrived at ISU and met "Father James from Ames." (Even now he goes by his lesser title when he's actually a full-fledged monsignor.) My first meeting with him was unforgettable. I'd stopped at the lounge of the Catholic Student Center, and was sitting with a half-dozen other students when this middle-aged guy — wearing black slacks and a sport shirt — walked in, slapped his hands together and said to no one in particular, "You know what, I haven't heard the *Tiger Rag* in a long time!"

With that, he put on the record, turned up the volume and proceeded to Charleston right there in the middle of the lounge. This guy could dance. He could kick, he could shuffle, he could even do that hands-on-the-knees, criss-cross thing that makes your legs look like they're switching sides.

We went on for almost the whole darned tune before he spotted me. Realizing I was a student he hadn't met, he flopped down in the chair next to me and said, "Hi, I'm Father Supple — who the hell are you?"

With my Catholic background, I thought the skies were going to open and God was going to strike us both dead. Especially him, because he was a priest and he'd said hell! But that proved to be only the beginning of a friendship and a regard that's never wavered. Fr. Supple is simply one of the most charismatic people I've ever met. He showed me that a priest can be a "regular person" as well as a religious leader, and he can be a clerical comic one minute and a compassionate listener the next.

He demonstrated this to many non-Catholics, as well. Things weren't as ecumenical back in the late '50s as they are now. People tended to be more critical of other beliefs, and wasted time finding what was wrong with other religions instead of learning what was right about their own. So when students discovered that the friendly man with whom they played cards in the Union was a priest, it changed their attitude, too — toward the entire Catholic faith.

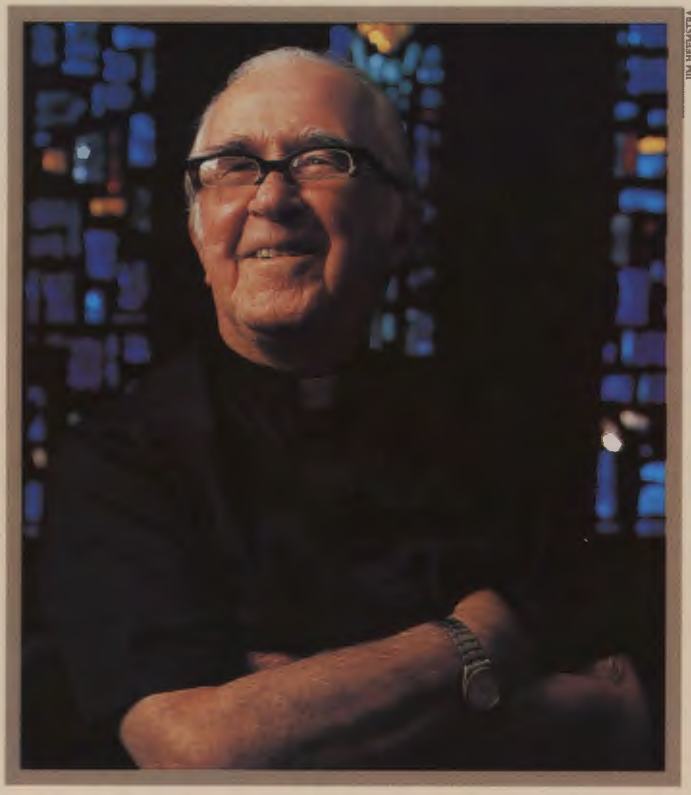
Laughing in church — or even smiling — was absolutely unacceptable back home. But during Fr. Supple's homilies, I often laughed out loud at jokes he told to drive home a point.

He was a superb athlete, too, taking an active part in any church game or activity. I'll never forget the time he showed up late for a softball game, still wearing his long, black cassock. Someone hit a high foul ball behind third base and we yelled at him. He took off after it full-tilt, cassock flying, and caught it cleanly over his shoulder, running away. Norman Rockwell would have loved to paint that scene.

But always with him there was humor — a love for life and laughter. In fact, when I emceed some of the campus Varieties shows, I found I could always bank on this vast source of material. Before each shtick, I made an appointment with Fr. Supple after 11 p.m., when his day was finally wrapped up. I'd make notes as he rattled off jokes from memory. Once he got going, one joke reminded him of another, and I was sometimes there till the wee hours. Even today, I retell those delightful, clean jokes — but not as well as he.

As any other ISU Catholic grad will agree, Fr. Supple has an absolutely uncanny memory for names. I've seen him stand outside church as people poured out after mass and say, "Hi, Jim," "Hi, Betsy," "Hi, Dan" without missing a name for 100 or more people. If he saw people he hadn't met, he'd stop them and ask their name. You could bet he'd greet them by name next time.

I've since forgotten his "system" for remembering, but, like the thousands of others who have been fortunate to cross paths with this charismatic cleric, I've never forgotten Fr. Supple. He's had such a positive effect on so many lives, and sent scores of students away from Iowa State as better people. He is a priest among priests.



JIM HEEMSTRA

MSGR. JAMES SUPPLE

Roy Reiman, a 1957 Iowa State journalism graduate, is owner of Reiman Publications in Greendale, Wis.

MEMORIES

An Iowa State engineering professor led a group of hotshot students on

OF A

a research expedition to the Arctic 25 years ago. Now retired, he

MANHATTAN

cracks the silence on the ultimate ice-breaker

OVER ICE

BY RICHARD L. HANDY

In early May 1970, the Arctic modified oil tanker, *S.S. Manhattan*, started on its second trip through the fabled Northwest Passage. On board was a specially selected "ice testing team" made up of four undergraduate engineering students from Iowa State University and two from the University of Minnesota.

I was invited to go along as the leader, follower, or whatever worked. For me it was a culmination of boyhood fantasies of Arctic exploration, and I quickly put aside some difficulties with bursitis and walking pneumonia that upon reconsideration became quite minor, and signed on. This would be my third trip to the Arctic; I had not been there since the mid-1950s.

Senior engineering students were selected in anticipation that they would be able to do more than just drill holes and test the ice. We went aboard in the dark, literally as well as figuratively, at Newark, N.J. We were met at the gangplank by a man who introduced himself as the third mate and instructed us where to go, but not how to get there. In the dim light of a single bulb I thought I detected a sly smile as we grabbed our duffle bags and other equipment and blindly stumbled and climbed through the maze of pipes and valves that cluttered the main deck. It was not until the next day that we discovered the catwalk that everybody else used.

I call this the polar bear's view of the Manhattan inching its way pole-ward.

AN UNUSUAL ICEBREAKER. The *Manhattan* was unusual for several reasons. Prior to its icebreaking duty, it was Aristotle Onassis' personal cruise ship on which he entertained his close friends (including the Italian diva, Maria Callas, who was especially close, at least until Jackie got in the way). The officers' and owner's quarters were placed amidships, away from the noise of the propellers and engines. The *Manhattan* probably is the only working oil tanker that had quarters decorated with Italian art, and with bathrooms having a curious European fixture called a bidet that looked like a water fountain for puppies.

Later modifications to the ship were a bit more practical, at least from our point of view. A specially shaped and reinforced bow was attached that would push down on the ice pack, the better to break it, and side reinforcement was slanted so ice pressure on the sides would be directed downward. It was side pressure from ice that took out many ships of earlier Arctic expeditions, including the *Erebus* and *Terror* of the Franklin expedition in the early 1800s. Later, ships were built so pressure from pack ice would push them up and out on top of the ice, but the *Manhattan* was far too heavy for that. So this was a bit of an experiment.

IMPORTANT PEOPLE ON BOARD. The students and I had separate accommodations, I with the officers and them with the crew, which was not exactly to my liking. I immediately discovered another facet of shipboard hierarchy when I inadvertently sat down for breakfast at the captain's table. I apologized for this breach of maritime courtesy, and the captain assured me that I could sit anywhere I liked. However, his eyes carried an unmistakable qualifier, "... except here."

The *Manhattan's* complement included three ice scientists from the U.S. Army Cold Regions Research and Engineering Laboratory (CRREL), a number of marine architects whose specialties were tankers and ice-breakers, a Canadian meteorologist whose specialty was sea ice, electronics expert, helicopter pilots and two captains with full Master's papers — which meant that our ice-testing team was rather far down the list. This became apparent when there was a reception to which we were not invited, probably because I had sat down at the wrong table to have breakfast.

The expedition leader was Stanley Haas, a 1948 Iowa State chemical engineering graduate. The 10-week voyage was sponsored by the Humble Oil Company (now Exxon) to help determine the feasibility of driving large ice-breakers through the Passage. The first voyage had been conducted the previous year, and had successfully negotiated the Northwest Passage and brought back one barrel of Alaskan crude oil to

illustrate that it could be done. However, the time was late summer, and only sporadic sea ice was encountered that yielded little information on ice-breaking. Our trip, then, was made in the early spring when the ice was thickest. We received no publicity, partly because the data obtained would be proprietary and confidential, and partly because of an unstated concern that the ship might not make it all of the way through. We were accompanied by the Canadian Coast Guard ice-breaker *Louis St. Laurent* to help out if we got stuck.

RESEARCH ON ICE. The goal was to measure the steady velocity of the ship in different ice thicknesses and relate it to the thickness and to the propeller thrust. The ice-testing team went ahead on snowmobiles to lay out a path, cut ice cores and measure ice strength and thickness. Fiberglass sleds carried our equipment, including tests and sleeping bags if we got left out on the ice, and firearms in case of polar bear attack. Fortunately, the bear population seemed more amused than antagonistic and from a discreet distance looked quite harmless.

After two or three of these full-scale tests, each requiring the better part of a day to accomplish, we began to feel a bit of frustration. When the ice was thick, the stable velocity at full throttle was zero. As we would blast ahead under full power, the ship would grind down to a dead stop and the test would be aborted. The captain then would regain control of his ship, which made him very happy because then he was free to pursue a more conventional ice-breaking mode — back up and ram, back up and ram, and repeat until the ship got wherever it was going.

During these routine ramming operations we were asked to have no more than two of the ice party on the bridge at any time, which actually was a major concession; ship's bridges normally are off-limits to everybody except the people who are running the ship. However, we were needed to measure and record the ship velocity and estimated ice thickness.

A PREGNANT IDEA ... Ramming into the ice created forward progress but not much in the way of useable data. I wondered if we might somehow evaluate the *rate of change* of the velocity with each ram — that is, the deceleration rate during ramming. Could we then apply Newton's Law that says that force equals mass times acceleration?

We borrowed a tape recorder in order to keep a record of the velocities measured at set time intervals during each ram. The tape not only recorded the data, it gave a running time base. Velocities were plotted versus time, and the slope of the graph at any velocity represented the rate of change, or deceleration rate. The final data reduction was made with my late father's (Walter Handy, a 1924 Iowa State graduate) six-inch slide rule that I happened to bring along for sentimental reasons and for emergency use. The emergency occurred when the on-board Wang computer kept reading lint in the punch card holes, and finally quit altogether.

... ***THAT WORKED.*** Our first results by the new method were almost astonishingly good: Where the ice thickness was thin enough that we already had data by the old, steady-state procedure, the ram data agreed, exactly. Where no data were obtainable by the earlier procedure, each ram gave a complete spectrum of data through the entire velocity range, from full speed ahead to stop. Not only was this many times more effective than obtaining a single test point at an equilibrium velocity, it allowed us to run tests any time we were under way.

When our results were sent to the head office in Houston, instead of a hearty congratulations, we received a request not to run any more ram tests because they were "too hard to interpret." For obvious reasons the request was ignored, but we did compromise to the extent that we interpreted the data for them, using classic "Engineering Problems" paper and my uncomplaining six-inch slide rule.

By then the ice team was fully involved in the tests and interpretation. Later, we were given key writing assignments for the final report, and were able to reduce the results to a single equation, a satisfactory outcome from this $17 million, 10-week expedition.

AN OLD TRICK FOR MEASURING VELOCITY. The success of the research obviously depended on obtaining accurate measurements of the ship velocity, which turned out to be rather difficult. The ship speedometer was not sufficiently accurate and became erratic when the ship was breaking ice. A radar unit was tested, but winds whipped the antenna on the remote transmitter so badly that the data were erratic and unreliable. On-board forward- and backward-looking sonar worked admirably in the open sea, but failed completely as soon as we started ice-breaking, and ice chunks started going underneath the ship.

Fortunately, based on previous experience with ice-breakers, Drs. Andrew Assur and Willy Weeks, ice scientists from CRREL, implemented a back-up plan for measuring the ship velocity. They directed the installation of two wooden 2-by-4s stuck out over the ship's rail, one near the bow and one amidship. We then could measure the time required for a snowdrift or other object on the ice to go the projected distance between the sticks. This was given as an additional responsibility for the ice-testing team, which eventually wore out five stopwatches.

Soon practically all of the students were on the bridge at all times, taking turns spelling each other for quick naps. After the initial awkwardness wore off because our informality was not according to the book — a happy Rich Maher occasionally would forget himself and start whistling, which is considered bad luck — a camaraderie developed that was confirmed when Captain Smith started referring to the students as his "Ice Cadets." "No whistling on the bridge, Rich," the captain would quietly announce, and Rich would grin and start humming.

We developed our own system for measuring the Manhattan's velocity.

THE COLLISION. As might be suspected, a mid-ocean collision is not a trivial matter, normally requiring the attention of an investigating board and many lawyers on both sides. While we were stopped for lunch, one day one of the Minnesota students, Jay Griffin, was showing color slides

of his adventures in Yucatan. He was interrupted when the ice pressure came on, indicated by loud grinding noises from the ship's hull. To determine if the slanted sides of the ship were working as anticipated, we turned on the sonar and confirmed that the ice was going over 50 feet deep. Then the ship telephone started ringing, and with each answer Capt. Smith appeared to become more agitated. "OK!" he finally muttered and stalked out of the room and up on the bridge. A few moments later there was a strange "thump." There probably were only two ships in the entire Canadian Archipelago, both were stopped, and they ran into each other!

A pedagogical bonus to the trip: Learning to build an igloo.

Apparently, the weakened pack ice between the two ships broke, allowing them to be slowly and inevitably pushed together. Prior to the collision, ice pressure prevented moving either ship, even if the steam power had been up. The special slanted sides of the *Manhattan* then engaged the smaller icebreaker above its hull reinforcement and caused the smaller ship to list 10 degrees to the starboard. The line of contact demanded that if either ship moved any way but away from each other, the *Manhattan* would scrape and saw its way into the side of the *Louis*.

The next week or so was spent contemplating alternatives. A first impulse was to wait until the ice pressure went off, but historically some ships have been held in ice for over a year and when the pressure went off, they sank.

By then Capt. Smith apparently thought that his Ice Cadets could do almost anything, and he called us together for a meeting. "Boys," he said, "I want you to get all of the ice augers out and show our shipmates how to use them, and maybe we can weaken the ice enough that we can get out of here."

The first hole indicated that the ice was over nine feet thick, so this was going to take some heavy effort on our part. The crew was happy to get out on the ice and got happier as the day went on, as the first mate kept circulating among them with a bottle in one pocket and a stack of paper cups in the other. Despite careful instructions about where and where not to walk, the radio operator took a bad step and went feet first into the icy sea that was relatively shallow, about 900 feet. One of the Captain's Ice Cadets, because for this I no longer would claim them, backed up to take a picture and then pulled the chap out. Unfortunately, even with our strong leadership the attempt failed; at the end of the day the ships were still jammed against each other like a big bear and a little bear hibernating.

The next day, the *Manhattan*'s chief operating engineer had an innovative idea. He suggested that we lay a pipe on top of the ice and run steam through it. If all went well, the pipe would cut down through the ice and release us. We laid the pipe, hooked up the steam, and the next morning we were free and out of there.

ESKIMO ESCAPE. We got along so well with the research that we took time to stop for two weeks near an Eskimo village, Pond Inlet. The Eskimos came for a visit by dog sled or snowmobile at any time of the day, and as the day was 24 hours long, that meant any time at all. The cooks always had fried chicken and fruit ready, and the Eskimos reciprocated with caribou and Arctic char, an excellent fish that they caught and sold for the southern market.

One day the Eskimos demonstrated building an igloo that photographs subsequently showed was in the shape of a catenary — the same shape as the St. Louis Arch, and I later wrote a paper about it. I asked how they know so much about a shape described mathematically with hyperbolic cosines, and the reply was, "We made it like our daddies showed us." The Stone Age must have had some very good training.

ICE-BREAKING VS. PIPELINES. Meanwhile, a decision already had been made not to attempt to take oil out by tanker, partly because of the now-obvious environmental concerns. The ice-breaking information remained unpublished, and later was sold to a Japanese firm. In 1974, Fen-Dow Chu, at the Helsinki University of Technology, obtained sufficient access to the report to make the following appraisal in a NATO conference proceedings: "... *The test voyage report of the* Manhattan *probably contains the most valuable full-scale ice-breaking data as yet available. On board of the ship were 60 scientists, about 200 tests were performed. The results of this was a very detailed as well as expert report... .*" We Iowa Staters must do good work. ◐

Where they are now

THE ICE TEAM:

ROGER BUFFINGTON (BS CE '71, MS Environ. Engr. '81) is a systems engineer for the City of Ft. Collins, Colorado.

JOHN HARTWELL (BS CE '71, MS Geotech. Engr. '74) is in charge of the Geoenvironmental Section of Terracon Consultants, Inc., in Omaha, Neb.

RICH MAHER (BS CE '71) is an attorney in Omaha, Neb.

NICK SUTTON (BS IE '71) is CEO and chairman of the board, HS Resources, Inc., in San Francisco.

STAN HAAS (BS Chem E '48) retired from Exxon in 1977. He now lives in South Miami, Fla.

ALAN FORSBERG (BS Minnesota) is public works director/highway engineer for the Blue Earth County Highway Dept., Mankato, Minn.

JAY GRIFFIN (Univ. of Minn.) had his own Minneapolis contracting business, but we have lost touch.

I earned ISU bachelor's ('51) and master's ('53) degrees in geology and a PhD ('56) in civil engineering. I retired as distinguished professor emeritus from ISU's Department of Civil and Construction Engineering in 1991. I soon will have a book published, *The Day the House Fell*, that describes soil difficulties encountered by home owners.

The *Manhattan* still is plying icy waters in Antarctica and elsewhere. A model replica is on display at the Smithsonian Institution in Washington, D.C.

The *Louis St. Laurent* continues to make news. Last July and August, it and the U.S. Coast Guard's *Polar Sea* traversed the Arctic Ocean across the North Pole from Alaska to Iceland.

-R.H.

Your Vote Counts!

The following candidates for the Board of Directors have agreed, if elected, to serve five-year terms. As an Alumni Association member, you are encouraged to vote for three of the six candidates. A ballot postcard with instructions for voting and mailing is enclosed in the magazine. Your ballot must be received in the alumni office by May 20 for your vote to be counted.

Paul J. Armbrecht, D.V.M. Veterinary Medicine 1971 Rockwell City, Iowa

"I would like to give back something to the university besides my financial support. I live in a rural area and have access to 'grass roots' concerns and opinions."

- Veterinary practitioner, Mally, Boettcher, Armbrecht P.C.
- Consultant, two swine breeding companies
- Advisory board, two pharmaceutical companies
- Co-chair, Iowa Pseudorabies Advisory Committee
- Writer, National Hog Farmer magazine
- Active in local pork producers and 4-H
- 1991 Practitioner of the Year, American Association of Swine Practitioners
- 1989 Veterinarian of the Year, Iowa Veterinary Medical Association
- Iowa's Favorite Swine Practitioner; Honorary Master Pork Producer
- Vice chairman of church; Sunday School teacher

Sidney C. Banwart Chemical Engineering 1968 Decatur, Illinois

"I'm proud to be an ISU alum! I fully support the mission and objectives of the alumni board. I can bring the perspective of one who has lived and worked in Illinois, Korea and Mexico."

- Product manager, Caterpillar Inc.
- Responsible for worldwide motor grader division
- Certified Quality Engineer, American Society for Quality Control
- M.B.A., University of Illinois; Executive MBA Scholarship
- Executive board member and finance committee chair, American Red Cross, Macon County Chapter
- Past president, American Society of Monterrey, Mexico
- Past president, American Society of Metals, Peoria Chapter
- Past president, Peoria Area ISU Alumni Club
- Past president, Heart of Illinois Big Brothers/ Big Sisters
- ISU Class Agent, Class of 1968

Lawrence A. Davis, Jr. Engineering Mechanics Ph.D. 1973 Pine Bluff, Arkansas

"I believe I can provide a perspective for the board of directors that will contribute to a more positive future for the university."

- Chancellor, University of Arkansas at Pine Bluff
- Professor of mathematics
- M.S., University of Arkansas at Fayetteville
- Chancellor's Medal for Exceptional Achievement
- Chair, 44th National Conference of Academic Deans
- Arts and Sciences Commission, National Association of Land Grant Colleges and Universities
- Distinguished Leadership Award for Community Service, National Association for Community Leadership
- Phi Beta Sigma Award in Education
- NAACP Award for Outstanding Contributions in Education
- ISU Distinguished Achievement Citation
- ISU Professional Achievement Citation in Engineering

Denise Bricker Essman Marketing 1973 Des Moines, Iowa

"I love ISU! I appreciate the preparation I received for the real world at ISU. I'm ready and willing to use my marketing communications skills to further the goals of the Alumni Association and university."

- President & CEO, Essman/Associates, Inc.
- Develops and implements marketing communications plans
- M.B.A., Drake University
- Past vice president of marketing, Greater Des Moines Chamber of Commerce Federation
- National Board, American Marketing Association
- Greater Des Moines Leadership Institute
- Leadership Iowa, sponsored by Iowa Association of Business and Industry
- "Up and Comer" Iowa Leader, Des Moines Register
- Former faculty member, ISU College of Business
- ISU Career Days speaker, "Yell-Like-Hell" judge
- Dean's Advisory Council, ISU College of Business

Jerry L. Loupee Chemical Engineering 1962 Savannah, Georgia

"I would like to find ways to foster a greater participation of and support from international alumni."

- Managing director, retired, Asia Pacific, Himont Incorporated
- Past president and director, Taiwan Polypropylene Co.
- Director of seven other companies throughout Asia
- Past president, American Chamber of Commerce, Republic of China
- Past Board of Governors, American Chamber of Commerce, Thailand
- Past vice chair, Asia Pacific Council of American Chambers of Commerce
- Delegate twice to national political party convention
- ISU Professional Achievement Citation in Engineering
- ISU College Fair booth, Bangkok

Jamie Lucas Stensland Journalism/Mass Communications B.A. 1988, M.S. 1993 Cedar Falls, Iowa

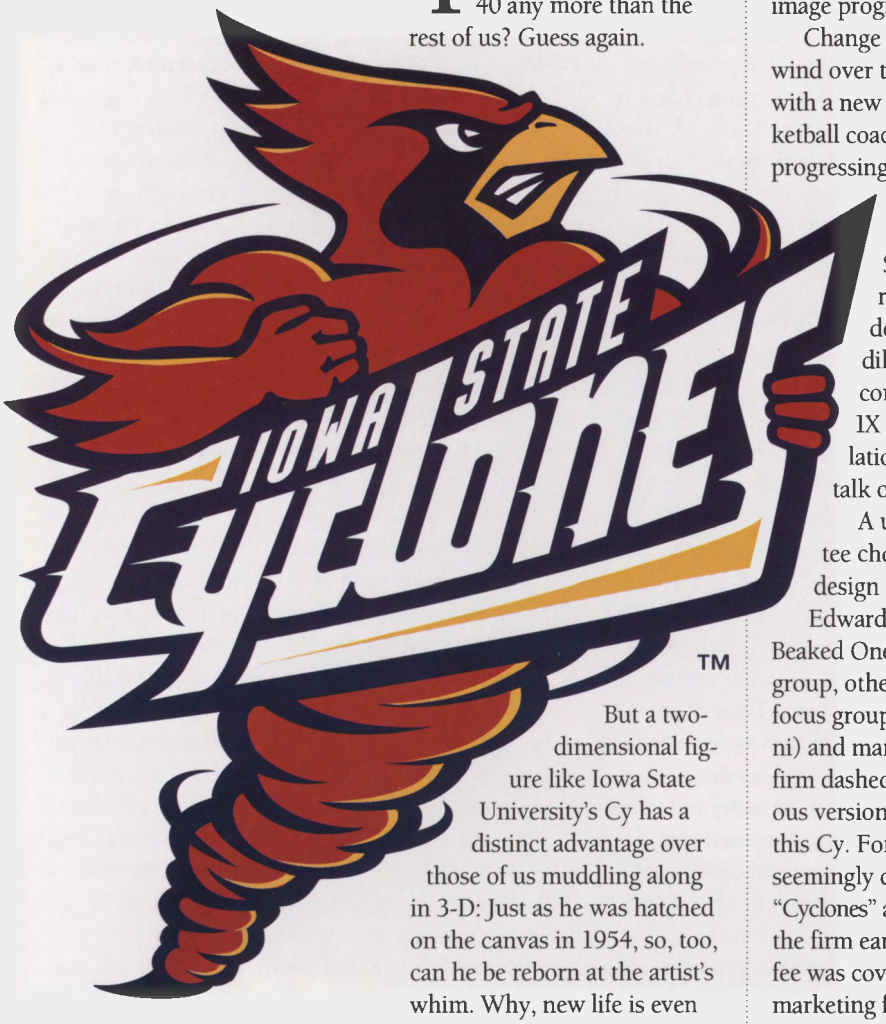
"I truly enjoy participating in ISU alumni activities and would be honored to represent the Alumni Association and its members. I love Iowa State and would like to be involved in planning its future and in its success."

- Marketing officer, Homeland Bank
- Sartori Hospital Foundation Board of Directors
- Cedar Falls Arts Alive Board of Directors
- Waterloo Downtowners Board of Directors
- Cedar River Runners Club Board of Directors
- Committee Chair, Job Service Employers Council
- President, Northeast Iowa Cyclone Club
- Black Hawk County ISU Club officer and board member
- ISU legislative liaison
- ISU alumni ambassador

Old Bird, New Look

IOWA STATE'S ATHLETIC DEPARTMENT PUTS ITS BELOVED MASCOT THROUGH THE SPIN CY-CLE

You think university mascots relish turning 40 any more than the rest of us? Guess again.



But a two-dimensional figure like Iowa State University's Cy has a distinct advantage over those of us muddling along in 3-D: Just as he was hatched on the canvas in 1954, so, too, can he be reborn at the artist's whim. Why, new life is even easier in 1995. Slick software, a few keystrokes — *wham!* — fountain this, Ponce de Leon.

But while ISU's Department of Intercollegiate Athletics set out last year to put a new spin on its avian ambassador, little could it have known how literally it would accomplish the feat. Has the bird hovering above been spun, or what? (This is the lead "mark" in a package combining Cy artwork with dynamic typography. The department will use it to complement ISU's overall image program.)

Change is swirling in the wind over the Olsen Building, with a new football coach, basketball coach and construction progressing on an $8 million building. Director of Athletics Gene Smith is nearing resolution of the department's budget dilemma, is nearing compliance with Title IX gender equity regulations and is quieting talk of axing sports.

A university committee chose the New York design firm Sean Michael Edwards to tweak the Beaked One. Leaning on that group, other campus sources, focus groups (including alumni) and market research, the firm dashed through numerous versions before arriving at this Cy. For adroitly melding seemingly disparate elements — "Cyclones" and a cardinal — the firm earned $45,000. The fee was covered by university marketing funds and donations to the ISU Foundation. The result: a bulked-up Cy with a new 'tude yet a clear grounding in tradition. "This looks aggressive, competitive, '90s," says volleyball Coach Jackie Nunez, an advisory committee member. "This is one of the most unique looks in the country."

Riding the wave of momentum created by Tim Floyd's 20-plus-win hoops season, ISU unveiled the gyrating Cy the day before the Cyclones embarked for the Big Eight Conference Tournament. Careful planning also allows the football team to have new uniforms for its debut against Ohio University.

The new look signals aggression in the business office as well as on the playing field. Anyone remotely familiar with the 10- to 20-year-old set knows that the right logo — the one granted the ever-coveted "cool" status — will sell. Smith sees the design bill as an investment that will pay off in the form of royalties. The art-typography ensemble allows both uniformity and flexibility in offering an array of retail products. Reid Crawford, ISU's vice president for external affairs, says the look also will:

- bring consistency to a department that has showcased as many versions of Cy and as many shades of cardinal and gold as it has teams, and
- aid student recruitment.

"Pro leagues are a couple years ahead [of colleges] in realizing that to be big-time, you've got to look big-time," says Brendan H. Byrne, director of business development for Sean Michael Edwards, which also has done logo overhauls for the Florida Panthers, Seattle Mariners, St. John's University and the University of Maryland. "[ISU] is one of the first Midwest universities to see the potential for exposure and retail benefit. This guy will do wonders."

Not bad for 41, huh?

State of the Union

ILLUSTRATION BY MARK MARTURIELLO

By Cathann A. Kress

OVER AND OVER AGAIN IN THE LAST YEAR, I have heard the same phrase uttered by different Iowans: "It doesn't happen here — the big cities, yes — but not here." Almost like a ritual, as Iowa followed the national trend we became more aware of the escalation of violence in our communities. The statistics are numbing, if one can bear to even consider them. It's worse to think of individuals represented by these numbers — the children, lovers or friends all surrendered to this great American tragedy: violence.

In response to this, Iowa State University Extension launched last fall an initiative to prevent violence for youth and families. As state violence prevention specialist leading this initiative, I find it easy to slip into the facts and begin the litany of an expert. The statistics and buzzwords — here's how the situation really is and the facts to back it up, if we don't do this there's going to be that, so you better get started right away. There is enormous pressure to stop violence before it claims another victim — get results, demonstrate an impact. It's easy to be angry or fearful and to incite this in others: *do* something, change policies, isolate troublemakers, teach anger management or how not to be a victim, train someone, keep it moving.

Violence is a reaction to a host of issues that align themselves in a community or individual and set off frightening results. To assume we can respond to violence by playing to collective anger or fear is simplistic at best, incendiary at worst. It compels us to join into a cycle with no end. Additionally, the idea that we can reduce violence by managing individual anger and fear is addictive. It allows us to avoid addressing the conditions that might have provoked such emotions in the first place.

To effectively address violence, we have to stop reacting to it and begin to explore what we want our environments to look like. Are we hoping to eliminate all forms of violence, or are some forms acceptable? Can you imagine a week, or even a day, not punctuated with the power of violence? Would we support entertainment that didn't make violence look humorous or exciting? Would we stop spanking our children, stop supporting the death penalty, stop military build-up?

These are not questions for an expert to answer, not even a violence prevention specialist. These are questions each of us needs to begin to answer for our own communities, our own families, our own selves. It's only when we have a vision of what violence prevention could do that we can begin doing it. More importantly, we need to consider the doctrine we operate within, moving from initiative to initiative reacting to each moment's most pressing problem. Answering questions about violence in our lives might clarify that problem prevention limits our vision of what our families can be.

Problem prevention does not, in and of itself, promote positive development of anything. However, the relationship does hold true in the reverse — promoting positive development of our communities, families or youth has a substantial impact on problem prevention.

For those who see extension's new initiative as a sad commentary on our times, consider the opportunity within the problem. This problem has emerged because of a convergence of factors: a widening gap of poverty, the use of alcohol and other drugs, the increased availability of guns, the lack of support for families, the increased isolation of youth. Erosion of our ability to solve problems through our connection to others too often leaves violence as the most apparent solution.

I am committed to helping communities regain that lost ground. They must be willing to take hard looks at what is happening in their schools, their playgrounds, their living rooms. Then they must unify. The more members of a community feel they belong, the less likely they are to perpetrate violence.

That unity will allow even the most disheartened citizen to recognize that things we all can do — listen, talk, share and trust — may not only bring us together to begin preventing violence, but may ultimately be the entire solution.

Cathann A. Kress is the state violence prevention specialist for Iowa State University Extension.

SETTING OUR SIGHTS

Introducing the President's Scholarship Campaign

Spring 1995 marks the beginning of an ambitious quest for Iowa State — the launching of the President's Scholarship Campaign. This bold new effort is designed to support students of achievement and promise. It is a campaign that reinforces Iowa State's land-grant mission by making the dream of a college education come true for more students than ever before.

In total, $26 million will be raised to endow a broad range of scholarships for students — National Merit Scholars, high-achieving minority students, student-athletes, campus leaders, and students from throughout the state who might not have the opportunity to attend college.

The President's Scholarship Campaign will energize our university's academic environment and enrich our community leadership. To find out how you can invest in Iowa State students, call 515-294-4607 and ask for the campaign brochure.

THE IOWA STATE UNIVERSITY FOUNDATION

MEMORIAL UNION, ALUMNI SUITE ▪ 2229 LINCOLN WAY ▪ AMES, IA 50014-7164

TODAY'S VISION, TOMORROW'S DESTINY

VISIONS

FOR MEMBERS OF THE IOWA STATE UNIVERSITY ALUMNI ASSOCIATION

Non-profit Org.
U.S. Postage
Paid
Permit No. 5
Davenport, IA

ISU Alumni Association
Alumni Suite, Memorial Union
2229 Lincoln Way
Ames, Iowa 50014-7164

PICTURE IT

It's a striking portrait: 150,000 people, one loyalty, Iowa State University. People like Jill Wagner-King, '76. People to whom the Iowa State Alumni Association is a focus for an intense allegiance. To keep that focus sharp, Wagner-King is playing a key role in supporting the Alumni Association Endowment Campaign. Her donation and those of many others will sustain and enhance the vitality of association services. Vitality that, for Wagner-King and many thousands, serves as a lens through which to reflect on a treasured past and project a future Iowa State University of promise. Picture it.

IOWA STATE UNIVERSITY
Alumni Association

Alumni Suite, Memorial Union, 2229 Lincoln Way, Ames, IA 50014-7164 (515) 294-6525