VISIONS

IOWA STATE UNIVERSITY'S ALUMNI MAGAZINE

YOUR CHECK HAS NOTHING TO DO WITH MONEY...

...BUT EVERYTHING TO DO WITH LEADERSHIP!

CHECK OUT THESE 6 CANDIDATES...

The following candidates for the Board of Directors have agreed to serve five-year terms.
As an Alumni Association member, you are encouraged to vote for three of the six candidates.
A ballot with instructions for voting and mailing is printed on the back of this slipcover.
Your ballot must be received in the Alumni Office by May 24, 1991, for your vote to be counted.

DONALD G. BRAUER

Civil Engineering 1952

Edina, Minnesota

Don is a life member of the Alumni Association and has served on the Iowa State Parents Association Board of Directors. President of The Brauer Group, Inc., Don is an environmental, resource and strategic planning consultant for public, private and nonprofit organizations. He received the master of arts degree in public administration from the Humphrey Institute, University of Minnesota. He is a director of The Freshwater Foundation, past president of the Edina Rotary Club, past chair of the Edina Rotary Foundation and of the Ebenezer Society Foundation, and a Fellow of the American Society of Civil Engineers. Other honors include Honorary Member of the Minnesota Chapter, American Society of Landscape Architects, Sue Tinker Award from the Minnesota Section of ACA, Rotary District Service Award, Minnesota Zoo Society Award and nominee for the Harlan Bartholomew Award of ASCE.

KEVIN L. BROOKS

Farm Operations 1980

Hampton, Iowa

Kevin is a member of the Alumni Association and the National Cyclone Club. He serves on the district board of the Cyclone Club, coordinates the North Central Iowa Strength in Numbers campaign and plans Cyclone Club and ISU Alumni Club events. As executive vice president of Hampton State Bank, Kevin is responsible for lending, investments and operations, as well as extensive marketing efforts and customer relations. He is currently vice president of the Franklin County Development Association, trustee of his church and director of Hampton Rotary. He has been a director or officer for the Chamber of Commerce in three Iowa communities, past officer of the County Fair Board, served on the Iowa Young Bankers Board of Directors and the Iowa Bankers Association Agriculture Committee and received the Hampton FFA 1990 Community Service Award.

ROGER G. FELDMAN

Doctor of Veterinary Medicine 1950

College Station, Texas

Roger is a charter member of the Gentle Doctor Society, a member of Order of the Knoll and life member of the Alumni Association. A veterinary clinical pathologist with a master's degree from Auburn University, he retired from Texas A&M University as associate professor emeritus in 1990. He is a member of the American Veterinary Medical Association and two allied associations. For more than 20 years he has been a key spokesman for Texas A&M throughout the U.S., a reader of graduates at commencement and announcer for athletic events for A&M and the Southwest Conference. A recipient of the Former Students Faculty Distinguished Achievement Award and Memorial Student Center Distinguished Service Award, Roger has been active in his church, past president of Kiwanis, United Way, several musical societies, athletic officiating groups, former mayor and school board trustee.

DONALD H. JORDAHL

Agricultural Education 1958

Des Moines, Iowa

Don is a member of the Alumni Association and the ISU Gold Club and a director and past president of the Des Moines Cyclone Club. He is vice president, correspondent banking, Bankers Trust Company, responsible for financial services for commercial banks and bankers throughout Iowa. A graduate of the Graduate School of Banking at the University of Wisconsin and at the University of Colorado, Don is on the faculty and is past president of the Des Moines Chapter, American Institute of Banking. He serves on his church council, is a director of Des Moines Kiwanis, YMCA committee chair, past president of Adelante Fraternity Alumni Corporation, director of Adelante Educational Foundation and publisher of Personal Banking Newsletter. His honors include Alpha Zeta, Gamma Sigma Delta and national awards for public speaking.

ANNE TEMPLEMAN ROBINSON

Bacteriology 1980

Washington, D.C.

Anne is an officer for both the ISU and Iowa alumni clubs in Washington, D.C. An attorney for McDermott, Will & Emery, she practices health law and volunteers for the Washington Legal Clinic for the Homeless. She received the master of arts degree in hospital administration from the University of Iowa in 1986 and the JD degree from George Washington University in 1990. As an undergraduate at Iowa State, Anne was a Student Alumni Association Cyclone Guide and Peer Adviser, and she served on the Veishea Central Committee and the Greek Programming Committee. While in law school she was Topics Editor of the Journal, a judicial intern, Dean's Fellow and member of the Moot Court Board. A member of the ISU Alumni Association, Anne also has been chapter adviser for Alpha Phi fraternity, evangelism chair for her church and a library volunteer.

ROBERTA SIMPSON DOLBEARE

Journalism & Mass Communication 1976

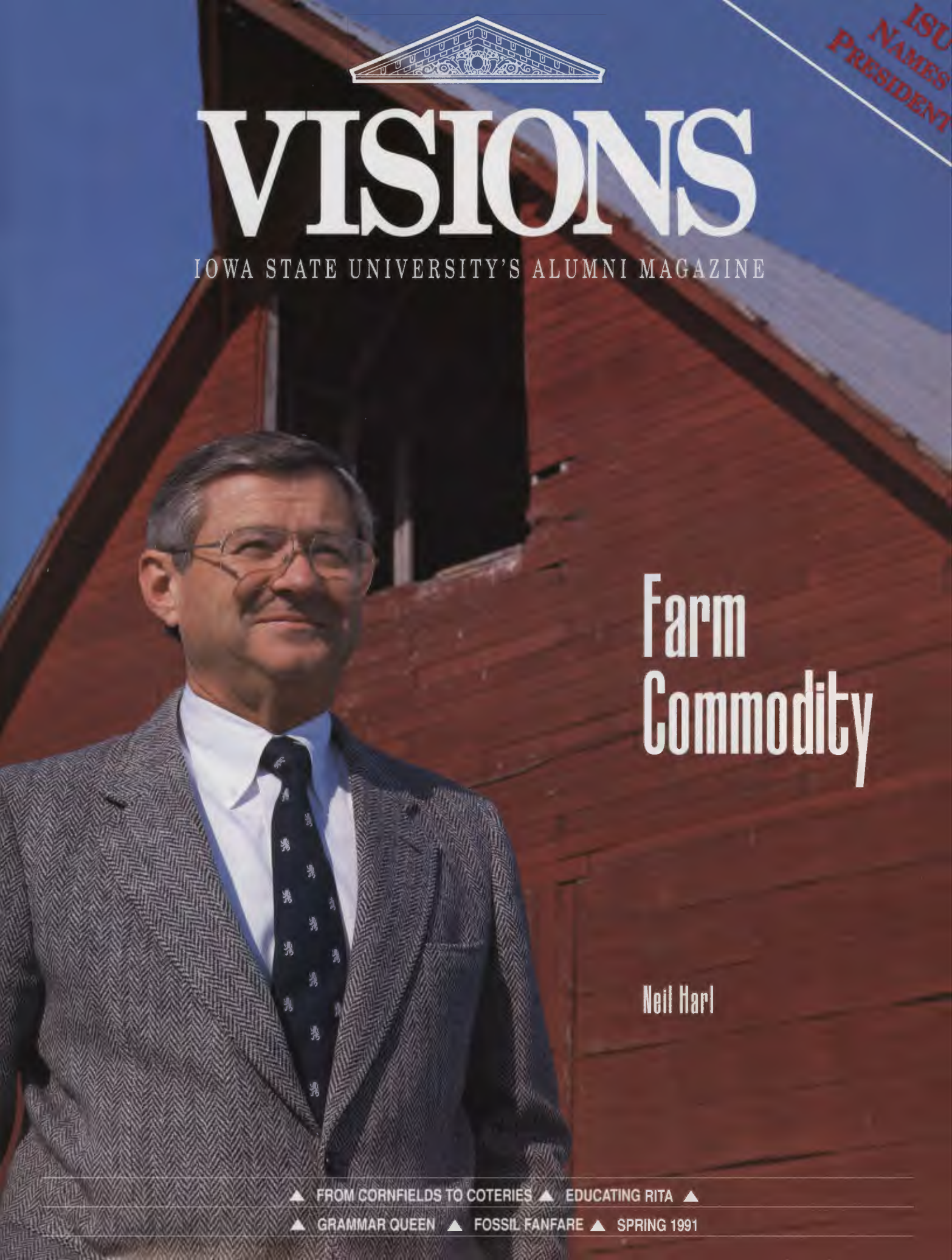
New Canton, Illinois

Roberta is a life member of the Alumni Association and a volunteer in the St. Louis area. As the marketing services manager and public relations director for Stark Bro's Nurseries & Orchards Co, she manages the catalog and promotional production department and also coordinates outside advertising and art production for CommuniType, a company she owned and sold to Stark Bro's in 1989. Roberta serves on the public relations committee for the VISION 2000 program in Louisiana, Missouri, and is a member of the Pike County (Illinois) Mental Health Board. She has been president of Raintree Theatre Guild and the Louisiana chapter of the American Association of University Women. She also serves on committees for the Garden Writers Association of America, Mail Order Association of Nurseries and Direct Marketing Association.

ISU Names President

VISIONS

IOWA STATE UNIVERSITY'S ALUMNI MAGAZINE



Farm Commodity

Neil Harl

▲ FROM CORNFIELDS TO COTERIES ▲ EDUCATING RITA ▲
▲ GRAMMAR QUEEN ▲ FOSSIL FANFARE ▲ SPRING 1991

THIS IS THE EIGHTH IN A SERIES OF MESSAGES EXPLAINING THE MANY PROGRAMS SUPPORTED BY YOUR MEMBERSHIP IN THE ISU ALUMNI ASSOCIATION.

(LEFT TO RIGHT): KAREN KELLOGG, AMES; MARGARET DANIELS, AMES; STEWART BUCK, DES MOINES.

YOUR MEMBERSHIP MAKES A DIFFERENCE

Eldin, here's your chance. No more restricting your works to Murphy Brown's bathroom ceilings. Here's the end to taking gaffe from unappreciative patrons who don't know an acrylic from an easel. Join fellow artists like Karen Kellogg, Margaret Daniels and Stewart Buck and express yourself at the Alumni Association's biennial art competition and exhibition.

On display this year from May 24 to July 2, the juried exhibit in the Memorial Union's Gallery will showcase the best of Iowa Staters' works in drawing, painting, printmaking, photography, graphic design, clay, fiber, metal, wood and other media. The prize winners will be announced at a reception June 6, held in conjunction with Alumni Days.

Come on, Eldin, all you have to do to qualify is be a producing alumni artist. Oh, about that alumni thing ... s'pose Murph would let you commute from D.C. to get that degree, maybe? Or take a leave of absence from that mural of the Revolutionary War that you're painting above her refrigerator? Or how about a correspondence course? Yeah, that might work...

Alumni Art Competition: Just one of dozens of programs made possible by your Alumni Association membership.

SPRING LINE UP 1991

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ROBO PROF

Nobody questions Neil Harl's academic, economic, legal and ag policy genius. The question is, how does he do it all?

By Dan Davenport

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PREHISTORIC PITCHMAN

With an assist from 50-foot dinosaurs and saber-tooth tigers, an alumnus lends new meaning to the phrase, "This belongs in a museum."

By John Johnston

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ENGLISH LESSONS

Tutoring London's inner-city kids was an unexpected and rewarding side trip for ISU students.

By Tom Emmerson

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IMMEDIATE FAMILY

A mid-life jolt brought a rural Iowa couple to a sorority and a new beginning as Mom and Pop to the multitudes.

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COVER PHOTO: JIM HEEMSTRA

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VOLUME 4 NUMBER 1

Learning Curve

If this is 1991, I must be smart

If it weren't so intimidating, it would be hilarious.

Next month marks the 10th anniversary of my graduation from Iowa State. Based on a decade of practicing my craft, I have been asked to trudge over to the Landscape Architecture building tomorrow to share with a journalism class the many pearls of wisdom I have so carefully strung this past decade. But how do I tell them we're looking at a string that's bracelet-length, tops?

Wisdom. What do I know about wisdom? The people who addressed my journalism classes were much more worldly than I. They didn't stand awkwardly in front of a group of bored seniors, struggling to sound grown-up while really wondering if the newest illustration was going to work or if the load of whites ever got thrown in the dryer or if their collective slips were hanging down below their hems. (Actually, I don't recall having many speakers 10 years ago who were of the slip-wearing persuasion.) Nope, they stood there in all their neatly pressed, shiny-shoe splendor and waxed eloquent about life in the real world.

So what can I tell them about my world? I guess I could talk about how a decade ago I flounced out of what was then the Press Building, still uncertain about my destination but convinced that words would be my ticket. Some 119 months later, I'm back, and have been for all but one of the past 10 years. I work only a block or two from what is now Hamilton Hall, and I occasionally edit my former professors *(see "English Lessons," page 22)*. I still walk around the zodiac and become hopelessly lost in the stacks of what we now call the Parks Library.

Obviously, a decade doesn't necessarily guarantee change. Springsteen and Emmylou Harris dazzled Hilton audiences even back in 1981, rocking amid our Bics that flicked. The 1981 Institute on World Affairs implored us to recognize the tragedy of international hunger. A Republican moved into the White House. The FBI questioned Iranian students on campus; these days, they've been quizzing Iraqis.

And yet this isn't the place I drove away from 10 years ago in a less than dependable 1974 Maverick. Back then, our fearless leader, President W. Robert Parks, (or "W. Bob," as we preferred) was a sixtysomething humanist who had occupied the Knoll for nearly as long as many of us had been alive. Next month's graduates will have lived through two subsequent administrations, strategic long-range plans and a furtive shove back into the high-tech arena. There is no more Boyds, or Minskys, or Karl and Marty. The curriculum now boasts a minor in African-American studies. February had a Condom Week. And the Cave Inn has gone non-alcoholic.

A survey recently released by the American Council on Education claims that college freshmen "continue to show a decreasing interest in pursuing business careers and making money and an increasing concern for the environment and better race relations." Ten years ago, it was most fashionable to head out for either Denver or Dallas to get rich quick, buy a BMW and join the Junior League—all by 25. (Okay, maybe you had until 30 to join Junior League.) Those of us who chose to stay in the Midwest spent too much time apologizing for so pedestrian a decision.

Apparently I should use all this background on which to base my remarks. But what morsels of it do I actually impart? Do I tell them the really important things a journalist needs to know, like find a good dental plan and don't date sports editors? Do I tell them to read Sherry Ricchiardi's *Women on Deadline*, an inspiring collection of interviews with some of the nation's best female reporters and columnists? Writers like Anna Quindlen and Molly Ivins can articulate much better than I how the best journalists report from the gut, concentrating more on their prose and less on their posturing.

Or do I tell them that I'm still learning, too? That 10 years out in the profession is certainly a start but not even halfway around the block? That I still have more questions than answers at age 32? That I'm willing to accept that it's OK not to know it all? Well, at least not yet....

—Debra Gibson

LETTERS

A Question of Balance

In view of the blatant and inaccurate statements by Dan Davenport ["Balancing Act," Winter '91], I feel compelled to set the record straight. As a recent graduate of the University of London (master of science, laboratory animal medicine), I can assure him that animal-related research is alive and quite well in the United Kingdom! If he would care to research the record, he would find that a wide variety of animal species are utilized under a very progressive regulatory atmosphere.

And the singular statement that, "...Britain now contributes few biomedical gains..." is a sure injustice to the entire world scientific community. What facts substantiate this? What fields of research? Surely ICI, SmithKline and Wellcome pharmaceutical companies would disagree. The Ministry of Defense, the University of Cambridge, Oxford University, the University of London, the London Institute of Psychiatry, Charles River U.K. and others would likewise object. I could go on and on. Mr. Davenport, I fear, uses journalistic license to make a point at the expense of public truth.

KERRY L. TAYLOR, DVM '84
FREDERICK, MARYLAND

Thank you for "Balancing Act" [Winter '91]. It is reassuring to hear that ISU has kept its head while all about, people were losing theirs concerning the animal rights movement. This story should be required reading for all students, faculty and ISU employees.

Could you follow up with a story on how ISU is teaching and promoting sustainable agriculture? Please deal with how that relates to sustainable lifestyle. Aim for demonstrating enough profit potential to help preserve family farms. Mention what is being offered other institutions, states and foreign countries. Show how a move away from monocultures could improve world environment and reduce population pressure.

If there are programs underway to identify, develop and promote alternative energy, they need publicity. A companion subject could be the most successful conversions of waste to energy, waste disposal, recycling and conservation of natural resources.

The publication of VISIONS is the most encouraging thing I have experienced from ISU since graduation. I became a life member of the Alumni Association to help make such things possible. Now I am glad I did. It may be hard to measure how cost-effective you are, so use letters like mine to help tip the scale in the competition for funds to carry on. Then keep on keeping on.

ROBERT F. JONES, '52
WARREN, MICHIGAN

At What Cost?

As a father of two ISU graduates, two currently enrolled ISU students and living in nearby Minnesota, I can see why you need to advertise to get students [Winter '91]. The cost of tuition to Iowa residents is quoted as $1,952, and $6,470 to the rest of the world. Granted, ISU is an institution of high esteem, but at this rate your alumni who have made their mark outside of Iowa would be hard-pressed with this disparity of tuition. This disparity only appeals to the very wealthy, the foolish and those who choose a fictitious Iowa residence. Do the alumni in the 49 states agree or has this disparity of cost of education been kept a secret?

The question is: Can Iowa residents alone keep ISU with a graduation class in the future?

TERRY WANNARKA
MINNETONKA, MINNESOTA

In the Right Direction

I have just finished reading the winter issue of VISIONS, and I want to tell you what a great job your fine staff has done with this publication. It gave me the good feeling that Iowa State is not only maintaining but enhancing its reputation and that is quite a plus these days. I think Gordon Eaton gave us a great revival of spirit and headed us in the direction of a greater university.

GEORGE L. SEATON, '23
BURR RIDGE, ILLINOIS

Slip Up

Other fans of figure skating may already have pointed to a mistaken caption on page 27 of VISIONS [Winter 1991]. The pair skaters shown posed against the abstract backdrop are Kitty and Peter Carruthers, not Tai Babilonia and Randy Gardner. The Carrutherses are best known for the tremendous performance that won them the Olympic silver medal in 1984.

Keep up the good work.

HOMER J. HAGEDORN, '50
LEXINGTON, MASSACHUSETTS

A Fan on the Front

I just wanted to let you know how much I enjoyed the cover of your winter edition of VISIONS. The desert cover and the pictures inside have become a very familiar sight for me for the past six months. I'm a Marine Corps Combat Engineer Company Commander with the 1st Marine Division out of Camp Pendleton, Calif. We've been driving the desert roads and living amongst the Bedouins since August 17. You would not believe all the Iowa Staters who are here. I know of five other Marine Corps officers and have met others. Our conversations always bring us back to the fond memories of Ames and Iowa State.

It is great to know that even in the heartland of Iowa, we have not been forgotten! Thanks.

CAPT. MICHAEL MICUCCI, '84
SAUDI ARABIA

P.S. The enclosed picture is of myself (left) and Gunnery Sergeant Dennis Cheshier, who used to be a Marine Corps recruiter out of Des Moines. He has also recruited many Iowa Staters into the ranks of our Corps.

Martin Jischke says ISU's biggest drawing card was the "clear evidence that Iowa takes education very seriously."

NEW TO THE KNOLL

Missouri-Rolla chancellor set to take over as ISU's 13th president June 1

In the wee hours of Thursday morning, Feb. 21, Martin C. Jischke turned to his wife, Patty, and smiled. "It's hard for me to believe," he said, "that there's a better job in the whole country for me."

Barely a dozen hours later he formally accepted that job — the presidency of Iowa State University — by reiterating his delight. "It's a remarkable match," he said at his first press conference as ISU's 13th president.

From the State Board of Regents that hired him to legislators, university administrators, professors, students and everyday citizens, Iowans everywhere hope the fit is as snug on this end.

Soon they begin finding out. Jischke plans to move into the Knoll and 117 Beardshear Hall by June 1, at which time he says he'll be set to get on with his primary goal: Continue former President Gordon Eaton's quest to make ISU the country's premier land-grant university.

"I'm intrigued and captivated by that idea," says Jischke, an MIT-trained aeronautics engineer. "I have no illusions. It'll take resources and ambition. It's challenging, but doable."

In an interview with VISIONS, Jischke touched on several other key topics, including:

▲Tenuous state funding: "I'm not daunted at all by these temporary problems. The real question is, *What's the level of support in the long run?* Iowans value education deeply. The opportunity to be in a state of nearly three million people who share that purpose is heady stuff."

▲ISU's long-range plan: "[The plan] is right and appropriate. Progress has been made. But no university is ever finished. That's part of what comes next — getting along with more progress."

▲The research-teaching mix: "[ISU's] mission lies in instruction, research, public service and extension. My hope is that we accomplish that full mission, and out of that mix we realize a contribution to the state and the nation that is distinctive, unique and very rich. I do not see a conflict with research and instruction."

▲Alumni relations: "It's important to get out there. [The president] needs to sense the intensity of interest, the depth of commitment, the pride. And it's equally important to reflect those same emotions to alumni. They need to be assured that [Iowa State] is in the hands of somebody intensely committed to the institution."

The regents picked Jischke from a list of seven finalists assembled by Iowa State's presidential search committee. Other finalists from the 160 applicants were: James Bruning, provost at Ohio University in Athens; Earl Dowell, dean of the Duke University engineering school; Milton Glick, provost and interim president at Iowa State; Lee Jones, executive vice president and provost at the University of Nebraska; Robert Rutford, president of the University of Texas-Dallas and Gershon Vincow, a vice chancellor at Syracuse University.

"I'm thrilled with the selection," says David Holger, chair of the 26-member presidential search committee and head of the Department of Aerospace Engineering and Engineering Mechanics, of which Jischke will be a tenured professor. "Wherever [Jischke] has been an administrator, he's moved his organization forward. He's a Midwesterner at heart, with a great work ethic and enthusiasm. You watch — people are going to be very pleased."

Regents President Marvin Pomerantz says he is "absolutely delighted with [Jischke's] credentials. He's the right person to lead Iowa State and continue the momentum."

(Editor's note: VISIONS will profile Jischke in detail in the Summer '91 issue.)

THE JISCHKE FILE

Born: Aug. 7, 1941, Chicago.

Education: Bachelor's degree, physics, 1963, Illinois Institute of Technology; master's (1964) and doctoral (1968) degrees, aeronautics and astronautics, Massachusetts Institute of Technology.

Experience: Chancellor, University of Missouri-Rolla, 1986-present; dean, University of Oklahoma College of Engineering, 1981-86; OU interim president, 1985; director of OU School of Aerospace, Mechanical and Nuclear Engineering, 1977-81; White House fellow, special assistant to the U.S. secretary of transportation, 1975-76; OU professor of aerospace, mechanical and nuclear engineering, 1968-77.

Family: Wife, Patricia Fowler Jischke; children, Charles, 14, and Marian, 9.

Quote: "New presidencies can be pretty exciting. I want to work in a way that's appealing and inspiring to people."

Research into energy, mental health to be housed in new centers

Two more centers are in the process of being established at Iowa State. The Iowa Energy Center, created by the Iowa General Assembly in 1990, will conduct and sponsor research to decrease the state's dependence on imported and non-renewable fuels, minimize the environmental impact of energy production and consumption, reduce needs for more power plants and encourage use of alternative energy. "This center will have a major impact on how we use and produce energy in this state," says Patricia Swan, Iowa State's vice provost for research.

In its first year, the center will be funded by the Iowa Utility Association, the Iowa Association of Municipal Utilities, the Iowa Association of Electric Cooperatives and the Department of Natural Resources.

The ISU campus also will be home to the Center for Family Research in Rural Mental Health. The center was established with a five-year, $4.4 million grant from the National Institute of Mental Research. "The new center will help provide the research needed to develop more effective mental health services in rural areas which too often have been neglected," says center director Rand Conger.

Scientists from ISU and the University of Iowa will work at the center, which is a unit within Iowa State's Social and Behavioral Research Center for Rural Health.

GARY CLARKE

War in the Middle East prompted numerous rallies and protests on the Iowa State campus. This late February, 100-member march, organized by People for Peace in the Middle East, drew protest from about 25 people voicing their support for U.S. troops in the Persian Gulf.

VISIONS chosen tops in competition

For the first time in its three-year history, VISIONS magazine won first place in the alumni magazine division of the Council for the Advancement and Support of Education (CASE) District VI competition.

The magazine, edited by Debra S. Gibson, won 12 other top-three awards in helping Iowa State win its second straight Sweepstakes Award for overall publications programming.

VISIONS staff members won five additional first-place awards:

▲art director Daniel L. Reeder, in the visual design category;

▲writer Dan Davenport, in-depth coverage ("Betting the Farm," Fall 1989, and "A Stitch in Time," Winter 1990) and sports story ("Whoo, Coach!" Winter 1990), and

▲photographer Jim Heemstra, feature photography ("Critics' Choice," Spring 1990).

Davenport won second-place honors in feature writing ("What a Press Run!" Summer 1990) and sports ("Running From Cover," Summer 1990).

And third places went to:

▲Gibson, feature writing ("The Phantom Opera," Winter 1990, and "Critics' Choice," Spring 1990);

▲Reeder, cover design;

▲photographer William Franklin, feature photography ("Where the Wild Things Are," Summer 1990), and

▲photographer Earl Richardson, series of photos ("The Faces of Biotech," Fall 1989).

NEWS BRIEFS

GONE GLOBAL In the past three years Iowa State's agreements with foreign universities have increased from 29 to 61. Keith Whigham, interim director for International Affairs, says most of those international agreements involve faculty and student exchanges or cooperative research projects.

JAKE CHOICE 1947 Iowa State graduate Allen Jacobson, chairman and CEO of 3M in Minneapolis, has been elected chairperson of the United States Council for International Business. Jacobson says the USCIB "plays a pivotal role in assessing key global business issues."

WINDS OF CHANGE A new undergraduate major in advertising will be offered beginning in the fall. Advertising currently is offered as an emphasis area, attracting 240 students in fall 1990. ... Iowa State now offers a minor in African-American Studies. ... The Departments of Elementary Education and Secondary Education have merged with the professional studies programs that involve curriculum and instructional technology. ... The Department of Physics has been renamed the Department of Physics and Astronomy. ... The Department of Sociology and Anthropology has been divided into separate departments. ... The Department of Freshman Engineering has been eliminated, while the Department of Engineering Fundamentals and Multidisciplinary Design has been added.

MONEY MATTERS VISIONS has been provided additional information since publishing "Artistic License" (Winter '91), a story on state-mandated art acquisitions in public buildings. The Iowa State Class of 1939 provided the funds for The Garden of Light and Stone, the sculpture and paintings in the lobby of the Durham Center for Computation. Sevde Transfer of Ames contributed to the purchase of Janus Agri Altar, the bronze sculpture in the courtyard of the Agronomy Building.

CORRECTION In the Winter '91 issue of VISIONS, it was incorrectly reported that David Nichols developed an electronic part essential to the facsimile process, leading to ISU's current efforts to obtain licensing fees from fax machine manufacturers. It was David Nicholas, Ph.D. '71, who developed what he terms "the code synchronization scheme essential to the faxing process." The original news brief was titled "Get Your Fax Right." We didn't. Our apologies.

PROOF POSITIVE

After 30 years and 20,000 graduate theses, Mrs. Bishop signs off

She's been called God, Mrs. Hitler and Dragon Lady. And those are just the printable terms of endearment. Total strangers have been known to tremble at her presence. While chatting with a passenger on a flight to Mexico, she had only to mention that she was from Iowa State University to elicit: "Oh, no, you're not *that* lady?!"

Another Leona Helmsley horror story, this isn't. This is a tale about an uncompromising woman named *LaDena* — Mrs. Bishop to the 19,990 graduate students who managed to land her majestic signature on their thesis approval slips these past 30 years.

With such a horrific buildup, it was with more than slight trepidation that one entered the Beardshear Hall office of ISU's recently retired thesis editor. What if my object and verb don't agree? What if I "who" when I should "whom"? Will I be her mid-morning snack?

Anyone harboring such concerns was sorely disappointed. While Leona has earned every ounce of her underlings' contempt, it takes but minutes with the prim, affable LaDena to realize that she has been grossly miscast in the role of ogre. This is a woman whose most impious exclamations are "My heavens!" or "Golly sakes!" A woman who could be driven to tears by a mangled moth on her windshield. A woman so sensitive she never corrected theses in red ink (she preferred a more soothing green), and always signed OKs in a color matching her outfit.

Just where did thousands of students — and at least one manuscript-proofing airline passenger — acquire a sour taste for this sugar-sweet lady? Forestry Professor Carl Mize, like most advisers, has heard many a disparaging word aimed Mrs. Bishop's way — but always before students actually met her. "They initially think the absolute worst," Mize says. "But then they realize her [office] being this difficult, narrow channel they have to get through doesn't mean she's not friendly. She's so accommodating."

JIM HEEMSTRA

LaDena Bishop has forgotten all but a few of the thousands of theses she's edited, but she remembers almost every author's face.

Says Bishop: "People have told me, 'You know, some students hate your guts.' But it doesn't take them long to realize I'm not such an old witch."

Bishop came to Iowa State on a whim. She had a music background and no professional English experience, but she did have a penchant for proper spelling, punctuation and grammar. For three decades, nary a thesis or dissertation — be it 15 pages or 1,500 — would be accepted without her exhaustive perusal. During peak approval time, that meant taking home four theses on weeknights and a dozen or so on weekends. "Sometimes I don't know what the kids would have done [without her]," says the woman with the most sought-after autograph on campus.

Here's a partial list: They'd have published hundreds of thousands of typos, split innumerable infinitives, constructed thousands of faulty title pages and compiled untold bogus bibliographies. "Mrs. Bishop was the keeper of the King's English," Mize says. "She had to make sure that quality theses came from Iowa State."

While Bishop rarely remembers thesis content, she's forgotten few faces and personalities. But who could forget? For all these years, students' antics religiously have been documented in a journal that, upon her retirement, was every bit as fat as the Houston Yellow Pages.

There was the time that, fed up with my-dog-ate-my-thesis excuses, she decided: No more extensions. No sooner was the resolution made than a student called, begging for an exception. "Not this time," she huffed. But later that day, in walked the student — casts on both arms. "I had to laugh," she says. "I said, 'You students will do anything for more time!'"

How about the time a young child accompanied Daddy to the thesis office? "What will you do when you grow up?" the maternal Bishop asked. "Will you go to college?" "Yes," the youngster snapped. "But I'm not going to write a thesis!"

Another grad student, preparing to pursue further studies elsewhere, had this concern: "They don't have a Mrs. Bishop there, do they?"

Certainly not. As nearly 20,000 ISU alums can attest — with varying degrees of affection — there's only one Mrs. Bishop.

JEFF HORNACEK LIKED OUR GAME PLAN.

So he renewed his membership in the ISU Alumni Association. The Phoenix Suns' guard quickly got the point: Alumni Association members score some hot benefits like VISIONS magazine, the university's events calendar and discounts on hotels, car rentals and merchandise. And their annual dues assist Iowa State with student recruitment, student leadership programs, ISU clubs and more.

So take it from Jeff: Don't drop the ball. Stay on a winning team when it comes time to renew your Alumni Association membership.

WHEN IT'S TIME TO RENEW, THINK ISU.

PIANO MAN

ISU alumnus searches for keys to ease musicians' pain

JOHN LINDERWOOD

A report on Ben Hillberry's research recently was published in "Medical Problems of Performing Artists."

Until a couple of years ago, the only health risk Ben Hillberry associated with piano playing was to the nerves — his nerves. With all four daughters taking piano lessons, the Hillberry house has heard its share of clinkers through the years.

But now the Purdue University mechanical engineering professor is keenly aware of a serious ailment suffered by a growing number of pianists: musculoskeletal finger and hand pain and injury caused by repeated playing. After using his specialty — biomechanics — to study forces at work in gymnasts' legs and rowers' arms in years past, Hillberry recently turned his mathematical models to the talented hands of pianists.

Along with a professor from the Indiana University School of Medicine, Hillberry studied professional pianists to develop detailed computer models. "We needed something to let us see exactly what was happening in the fingers while the pianist is playing," says Hillberry, who received his bachelor's (1961), master's ('64) and doctoral ('67) engineering degrees from Iowa State. With the models, the scientists were able to quantify stress on specific joints and tendons. One predictable finding: Just as the Hillberry girls' teachers undoubtedly emphasized repeatedly, there's a right way and a wrong way to play the piano.

"Teachers always tell students to play with curved fingers. We confirmed that," says Hillberry. "But we saw many, many different ways of playing the piano."

Their computer models allowed them to measure the forces created by each method. By using a digital piano, the professors devised a way to measure the fingertip load for any note played at any volume. Because they had captured the pianists' hands in action with stop-action video, they then could apply mechanics principles to calculate the forces acting on joints and tendons in the fingers in dozens of playing positions.

The recommendation: Don't play the piano with your fingers extended and parallel to the floor. The joint stress created with that position is up to twice that generated by curved-finger playing.

Although Hillberry didn't work directly with ailing pianists, he says his partner's experience with an Indianapolis performing arts clinic has shown that athletes aren't the only people who play in pain. "This is the pianists' livelihood," he says. "In the past they've been reluctant to let anybody know that they're injured. It's only recently that they've started coming out of the woodwork and seeking medical help."

While others with similar problems — assembly line factory workers, for instance — have for years been privy to sound medical advice, Hillberry says little assistance has been made available to pain-ridden performing artists. He hopes his National Institutes of Health-funded research changes that. But he says there is much more work to be done. He hopes to expand his two-dimensional computer model to three dimensions for more accurate loading calculations. He also wants to extend the model to include the wrist and forearm. "There not only are different finger positions," he says. "There are different arm movements, too, and that creates more stresses. I'm not an artist or a musician, but I think I can use biomechanics to help with these problems."

JIM HEEMSTRA

W. Roy and Gloria Jones Johnson hope to conduct further union investigations, including one into the expanding role of women.

Husband-wife union goes to work studying U.S. organized labor

Growing up in Chicago, W. Roy Johnson noticed that the city's labor unions seemed all but closed to minorities. Now an ISU industrial organizational psychology professor, he recently took a new look at unions — their effectiveness, their public perception and the changes they've undergone in recent years.

He and his wife, Gloria Jones Johnson, an ISU sociology professor, took that look from a new perspective: From within. From 1987-89, the scientists studied United Rubber Workers Local 310 at the then-Firestone Tire and Rubber plant in Des Moines. The investigation, supported by the National Science Foundation and ISU's Graduate College, began just as the union was gearing up to battle Firestone management. The Johnsons' work continued as Firestone was sold to Bridgestone Tire and Rubber. Such turmoil and eventual resolution made for fallow research ground.

"Unions have been getting so much attention in recent years," says Roy Johnson, pointing to recent well-publicized strikes by Greyhound Bus Lines and the New York Daily News. "We wanted to see what was going on from our [sociological and psychological] point of view." They saw that:

▲union members realize they have lost strength — they constitute about 17 percent of the U.S. labor force as compared to 33 percent in the late 1950s — but are eager to adjust to a changing society;

▲minority representation has improved — but not significantly at leadership levels. "The white males find minority membership important," says Gloria Jones Johnson, "but their sensitivity to breaking down the barriers in leadership isn't as great;"

▲members want increased public relations efforts. Long, intense strikes tarnished union image during the last two decades. As thousands of struggling non-union workers teetered on the tightrope of a volatile economy, they lost sympathy for union members demanding $21 per hour instead of $19. Now union members want more public education on the importance of workers' rights;

▲members want more attention paid to "non-bread and butter issues" like health care, child care, paternity leave and job sharing, and

▲despite negative trends, Roy Johnson says unions have "a great amount of loyalty. It's risky business to count [unions] out. We found adjustments they can make to allow them to grow."

Critics give thumbs up to Iowa State corn flick

Miracle, an ISU film chronicling the growth of corn from a single kernel to a mature plant, recently won the Council for International Nontheatrical Events' (CINE) Golden Award for documentaries. The seven and a half-minute film, the brainchild of ISU professor emeritus William G. Murray, was produced by Robert Lindemeyer and directed by Edward Rearick, both of Iowa State's Media Resources Center.

Scientists had warned the ISU film makers that time-lapse photography of the entire process was impossible for technical reasons. Lindemeyer and Rearick almost believed those naysayers several times, but after seven months and 30 different seeds, they finished the project. "But we were really stymied for a while," Rearick says. "At times it just never seemed to work out."

The film's $17,000 production tab was picked up by grants from the Iowa Corn Promotion Board and the Wallace Genetics Foundation. *Miracle* has been shown at film festivals in Hungary and Spain.

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Instruction Construction

$15.3 million grant helps ISU engineer high-tech education

With engineering technology advancing at breakneck speed, it's a given that engineering professors almost constantly must update what they teach. But too often, how they teach — and in particular how professors use that burgeoning technology — gets less attention.

Thanks to a $15.3 million National Science Foundation (NSF) grant, Iowa State is part of an eight-university coalition that will spend the next five years improving undergraduate engineering education. (The NSF required that the $15.3 million be matched by public or private funding.)

Joining Iowa State in the National Engineering Education Coalition are: California Polytechnic State University in San Luis Obispo, Stanford (Calif.) University, the University of California-Berkeley, Southern University in Baton Rouge, La., Hampton (Va.) Institute, Tuskegee (Ala.) University and Cornell University in Ithaca, N.Y. Arvid Eide, associate dean of instruction and student services at the College of Engineering, is coordinating Iowa State's involvement. And for the first year, David Kao, ISU's engineering dean, is serving as chair of the program's dean's council.

ISU and Cornell organized the coalition and led the effort to secure one of two NSF-awarded grants. Eleven proposals involving more than 140 institutions initially were submitted. "[The NSF] realized that so much work in engineering instruction is done in different, incompatible pieces on different campuses," Eide says. "It was looking for plans that fit together."

Eide says the coalition's plans involve four major areas:

▲modifying curricula;

▲improving the "pipeline" — preparing and motivating high school students for engineering careers;

ILLUSTRATION BY DANIEL WALLACE

▲improving "supporting technology" — using technology to take new approaches to instruction, and

▲marketing engineering to "the world at large."

Each of these four areas was assigned a committee within the coalition; since ISU's contribution to the NSF proposal concentrated on supporting technology, Eide is serving as chair of those efforts.

His work hinges on something called NEEDS — National Engineering Education Delivery System. Developed by ISU engineering professors Jeffrey Huston, Ron Nelson and Alric Rothmayer, NEEDS will be an instructional database that serves students and faculty. It can bring together history, theory, analysis, simulation and design in a single lecture and with a minimum of professor's prep time. With videos, slides and other information stored in a database, a professor could, for example, simultaneously display a bridge under construction, a computer simulation of the bridge, a history of bridge architecture and applicable equations.

"If we can get that information into a database," says Eide, "professors will be much more able to exploit technology." The ultimate goal is even broader: A repository that coalition members and other universities can add to and access.

While NEEDS will give instructors access to valuable new teaching methods, Eide points out that getting that technology where it belongs — to the students — requires one other step: The high-tech classroom. And it happens that, before the NSF proposal, ISU was developing two such classrooms (pricetag: $500,000) in the engineering headquarters at Marston Hall. By next fall, students will be privy to high-resolution screens, overhead cameras, downlinking capabilities and computer interaction. If, for example, a professor wishes to access the effectiveness of a lecture, he or she can instruct students to type answers into computer keyboards. Instantly the professor can see how many students sufficiently absorbed the material.

Says Eide, "We want to do everything possible to see that students get a better education than they got yesterday."

Kiss the wave good-bye

While playing teams from the U.S.S.R. and China in a tournament in Harbin, China, during the semester break, members of the ISU hockey club detected a distinct inhibition in the fans. So about 20 ISU skaters lined up on the ice and began demonstrating that great American stadium innovation: the wave. The crowd of about 7,000 took to it like Wayne Gretzky to an empty net. Even though security guards later stemmed the tide, Iowa State clearly was the most popular team. And why not? The Cyclones gave it one swell try.

Lo knows baseball. Lo knows statistics.

ISU doctoral student Tom Loughin (pronounced Logan) doesn't know diddly about endorsements, but his love for baseball and his Ruthian statistical knowledge turned a double play Bo Jackson would envy. In his master's thesis at the University of North Carolina — "Estimating the Run Score Potential of a Successful Stolen Base" — Loughin devised a tape-measure equation quantifying a player's run-scoring value. The Philadelphia native and Phillies fanatic's equation shines new light on the .300 slap hitter vs. .250 power hitter debate. His advice: "Take the .250 guy." At ISU, he's focusing his studies on more traditional stat fare: Something called Correlated Group Survival Analysis. "The purists would've thought [baseball] is a waste of a Ph.D," he says. "Most people wouldn't be screwy enough to do it."

No. 1 in your hearts and on your bumpers

Who says this is the Hawkeye State? We're big enough to give Iowa its Rose Bowl (heh, heh) and its eight consecutive football victories over the Cyclones (fluke city). But in gauging the most popular university, everyone knows the true barometer: vehicle registrations. Since 1988, when the state began hawking gold-colored plates with ISU red trim, Iowa black and Northern Iowa purple, 'Clone fans have outplated Iowa 1,462-1,288. The plates go for $50 beyond the normal license fee — $25 for scholarships and $25 for the state. So there was no bowl for ISU. Again. So Iowa won in men's basketball. Again. Big deal. This bumper poll clearly gives Iowa State undisputed license to claim a gold-plated victory.

Book 'em, Den-O

You might say Professor Eric Plutzer's Poli Sci 451 class has been under constant surveillance this spring. The studious, nattily dressed chap in the jacket and tie is Ames Police Chief Dennis Ballantine, a junior working toward his business administration degree between stints of marshaling Ames' finest.

Plutzer originally found the chief's presence somewhat arresting, but soon learned Denny is just another student trying to cop a grade.

Still, Ballantine's presence does have its benefits. How else to explain the class' zero crime rate?

ILLUSTRATIONS BY G. MICHAEL MADDOCK

Robo Prof

By Dan Davenport

Photos by Jim Heemstra

My candle burns at both ends;
It will not last the night;
But, ah, my foes, and, oh, my friends—
It gives a lovely light.

— Edna St. Vincent Millay

What becomes a legend most?

For Neil Harl, it's a breakneck schedule, a

dozen assorted agendas and the conviction

that being the best is the *only* ambition

Little could Pete Harl know what a glorious torch he was igniting when he struck a deal with his 4-year-old son: "Finish kindergarten and first grade in one year," the Seymour, Iowa, farmer promised young Neil, "and I'll give you a spring lamb."

Pass the matches.

Neil's spark burned kindergarten and first grade like kindling. Eleven years later, he was high school valedictorian, edging salutatorian and future wife, Darlene. At his 1955 Iowa State College graduation, his GPA was tops in the Division of Agriculture. He was the first to complete a joint University of Iowa (law degree, '61) and Iowa State (economics Ph.D., '65) program.

And his flame was still climbing.

Be it from an ISU classroom, the U.S. Capitol, a Monticello, Iowa, cornfield, a jumbo jet taxiing at Moscow's Sheremetyevo Airport or a ski boat on Missouri's Lake of the Ozarks, Harl has for nearly three decades burned a beacon for agricultural economists, farmers, politicians and students to follow. That he has become one of Iowa State's most widely known faculty members and the Midwest's premier ag economist is argued by few. He has earned similar renown nationally. A colleague has said Harl was "the single most important factor in the considerable advancement ... of agricultural law."

If some were hesitant to grant Harl such repute, many were convinced by the 1980s. The worst agricultural recession since the Depression ripped across the heartland like some berserk combine out of a Stephen King novel. Debt, bankruptcy, despair, even murder and suicide were strewn across corn fields, bank offices and living rooms. And through it all hurried Neil Harl, an Iowa farm boy whose own father barely escaped the grip of the Depression's long, cold fingers a half-century earlier.

Harl spotted the markings of the crisis in August 1981. Quickly he sounded the alarm. In a column last fall, Des Moines Register farm editor and 1952 ISU alum Don Muhm called Harl an "economic Paul Revere, trying to sound early the alarm of trouble in the countryside." Coon Rapids banker and 1990 Iowa gubernatorial candidate John Chrystal notes that Harl "helped stop a national tragedy."

And not just with his encyclopedic mind. Harl grew up with what he calls "a linkage with the land ... experiences so close to life itself." Many of those experiences, he knows, aren't kind. Pete Harl's family didn't lose its livelihood — they scratched through one winter on $100 — but Neil saw enough shattered hopes to gain a sensitivity for the thousands who weren't so lucky in the '80s. "He had to scratch hard," Muhm says. "Sure, he's got an awfully good mind. But no Harvard MBA can teach you the importance of some of these things."

Jay Shubat, who, at 64, lost a thousand acres near Seymour in 1986, had countless sessions with Harl — financial and psychological. "He gave us what strength we had," says Shubat, now semi-retired in Phoenix. "We couldn't save our land, but Neil did all he could. He told me, 'You're not the first. You're a good, hard-working farmer.' But the time came when we had to go."

Harl counseled hundreds of others, some during heart-rending, 6 a.m. phone calls to his home. Recognizing his efforts, the Register named Harl its first Farm Leader of the Year, in 1986. A year later the USDA gave him the Superior Service Award. In this state, to this man, that's practically a Heisman Trophy and an Oscar. It is a bizarre twist of irony that the same horrific blip in history that crushed so many dreams was one of the best things that ever happened to the career of a farm boy whose only wish once had been to work the land.

My candle burns at both ends ...

Though a coat and tie often raise eyebrows on the farm, Harl's roots and devotion to agriculture help make him one of the boys.

To be sure, the farm crisis helped make Neil Eugene Harl an ag econ star. A star that burns as brightly as predecessors who helped build Iowa State's enviable worldwide reputation: T.W. Schultz, Kenneth Boulding, Earl O. Heady, Luther Tweaton. If a journalist from London or New York needs an ag quote, Harl's phone likely rings. "He emerged [from the farm crisis] as the guy the media look to," says George Anthan, the Des Moines Register's Washington, D.C., bureau chief and the reporter Harl credits for breaking the crisis story. "He's a credible, articulate analyst."

Farmers concur. About 175 travel icy roads on a frigid January afternoon to hear him speak to the Central Iowa Farm Business Association (FBA). As usual, his presentation is laced with polysyllabic words (not unlike polysyllabic) fired Uzi-like but with a sharpshooter's accuracy. Not a farmer budges. When he's finished, he's mobbed by listeners wanting to reap more wisdom from the man who predicted the debt crisis. Only then will many ditch the rest of the program, climb in their pickups and slide home. "They figure such a dear friend to farmers earned the right to be heard," says Marvin Myers, a former Harl student and '73 ISU graduate who now is an FBA consultant. As one farmer put it in monosyllabic eloquence: "Hey, we trust the guy."

At 57, he's gained renown from the state house to the hog house — and the personal reward so often accompanying it — with four elements: a keen intelligence (IQ: 170), a passionate belief in ISU and its land-grant mission, a like concern for the farmer and, perhaps most important, an unflagging allegiance to Millay's aforementioned "A Few Figs From Thistles." He recites it like a proud youngster who's mastered the Boy Scouts' Oath.

"[Working] 16, 17 hours a day — that's nothing for the guy," says agricultural business Professor Ron Deiter. "He must be the most productive member of our entire profession." Here's how productive:

▲Extension-related presentations, day-long seminars and other engagements send him on the road more than 100 days a year. A recent seven-week stretch saw him on air or on stage in Des Moines; Ames; Des Moines; Lake Okoboji; Sioux Falls, S.D.; Orlando, Fla.; Denver, Colo.; Des Moines; Ames; Des Moines; Ames; Des Moines; Atlantic; Minneapolis, Minn.; Des Moines; Fayette; Fargo, N.D.; Muscatine; West Des Moines; Windom, Minn.; Lakefield, Minn.; Lincoln, Neb.; Oskaloosa; Fort Collins, Colo.; Mason City and Fort Dodge. He estimates — and Neil Harl estimates the way the rest of us calculate — that he is in contact with 16,000 people a year.

▲He regularly jets to Washington (13 times in one year during the crisis) to meet with federal officials in shaping agricultural policies.

▲Three times a year he updates his 15-volume, 10,000-plus-page treatise, *Agricultural Law*, considered the topic's definitive work. He's written five other books, some with more than 10 editions. The Register's Anthan says many full-time journalists could learn from Harl, whose first post-Army job out of ISU was as a field reporter for Wallace's Farmer magazine. It's no secret that his writing, along with his speeches, seminars and his six-figure professor's salary, long ago rendered him financially able to cool his flame.

▲The Charles F. Curtiss Distinguished

Professor teaches at least two large, upper-level classes per semester. Ag Law (Econ 451) never has had another instructor — and likely won't as long as this one produces CO_2. Though the class has upwards of 200 students, he assigns term papers, rigorously grading each himself. "[The papers] were due on a Friday," says December '90 ag business grad Dean Smith, who took 451 last fall, "and he had them back on Monday. And we're talking 12- to 25-page papers."

▲And now he's stoked his fire with a mammoth new undertaking: Leading ISU's efforts to help the Soviet Union and Eastern European countries build market economies. He coordinated a first-of-its-kind, on-campus course for finance and economic specialists last summer. He then traveled twice to the region last fall and is back again this month.

In introducing Harl before a speech several years ago, Iowa Corn Growers Association Public Relations Director Jerry Perkins called him "an agricultural resource only slightly less valuable than our topsoil." That's all the guy needs: higher planes to shoot for.

"I'm most impressed by Neil's industry and his tenacious grasp of goals," says Mark Drabenstott, vice president and economist at the Federal Reserve Bank of Kansas City and an ISU master's (1980) and doctoral ('81) degree recipient.

Tenacious may seem a peculiar adjective to describe this bookish, bespectacled academician with the nasally voice. But how else to describe a man who draws up a project schedule for vacation trips to Hawaii or his Ozarks condo — and builds 8-12 work hours into each day? A man who routinely schedules meetings late into the night? A man who took piles of work to the hospital for a six-day stay following quintuple bypass heart surgery in March 1990, and then, after his dismissal, stopped in the office on the way home?

It hardly takes a staggering IQ to link this racehorse pace to clogged arteries. In the weeks leading to his surgery, he so impressed his Des Moines surgeon, Dr. Ronald Grooters, with his thirst to know the heart as he knows economics that the doctor asked him to write a chapter for an upcoming book. Tubes in his arm and an ache in his chest, he was a beat writer racing deadline as he banged out the bulk of its 46 pages within days of surgery. It seems knowing dangers and easing work are polar mindsets for Harl.

On the desk in his fourth-floor, Heady Hall office rest 16 peach-colored phone messages arranged into neat rows resembling some sort of workaholic's solitaire game. Leaning back in his chair almost parallel to the floor, his hands behind his head and that confident smile on his square face, he hardly looks like the classic Type A. A low-fat diet and 30-miles-per-week speed-walking regimen have dropped his weight 35 pounds and his cholesterol from 296 to 180. Yet the work load never has been higher. "I know my welfare is tied to stress," he says. "But I don't feel even a low level of external stress." It is from within — where those dates, those figures, those debt recovery plans and treatise revisions pulse through his memory bank — that Harl is pulled taut. "You see potential for something, you can't bear not to be involved."

It will not last the night ...

Since 1990 heart surgery, Harl has attacked his daily, four-mile walks in typical fashion: Fast and focused.

Why is teaching Harl's first love? "There's something intensely rewarding in helping people see around corners," he says.

Harl's wife and childhood sweetheart, Darlene (they met in adjacent seats in ninth grade; she was Harris, he Harl), gazes from her dining room into the wooded area near her north Ames home. She's had this discussion with her sons — Brent, 31, a Harvard MBA graduate and chief financial officer for an electronics manufacturer in Rochester, N.Y., and Rodney, 20, a sophomore chemical engineering major at Cal Berkeley. Devoting 90 hours per week to academics, economics and family farms has left little for the family Harl. Darlene worries aloud: Practically since Brent was born and they lived in Pammel Court, "It's been all-consuming. [Neil] just can't let go...." But how do you let go when all your life you've been programmed to hold on tight:

▲To facts and figures: He and his now-deceased brother, Richard, would ease the monotony of cultivating corn by memorizing state capitals and county seats. "When he was four," says David Bryant, Harl's cousin and a retired ag writer, "he would play mind games with his dad, like how many trips around the field the combine would make. He'd jump right in." Sometimes too quickly; he had a marked stuttering problem until age four. Mable Smith, a cousin, says so many thoughts ran through his head, "his mouth just couldn't keep up." Today, when listeners razz him about his staccato speech, he chuckles and races on.

He'll refer to dates not by 1984 or fall 1984, but Nov. 5, 1984, a Monday. He offers that his first day of school, Sept. 1, 1939, coincided with Hitler's invasion of Poland. Appropriately, genealogy is a favorite theft of Harl's miniscule free time. Upon learning that his blood pressure had plummeted to 40/30 during his heart surgery, he became so worried about diminished mental capacity that, still ashen-faced in the recovery room, he routed something called "corporation exchange properties" — the most complex thoughts he could muster — through his circuitry. "When you can pull things out like that," he says, snapping his fingers, "the thought of losing it is quite concerning."

▲To events: Talk with Harl on the phone or visit his office and chances are you'll be in his files before his day's work ends sometime after midnight. Accounts of interviews for this very story, in fact, may have been tucked away for weeks. During the farm crisis he kept every phone message, every travel itinerary, all meeting minutes — even a scribbled-on church bulletin. Reflecting the significance he places on such collections, he turned over a box stuffed full of material to the Parks Library Archives — after using it to write a book chronicling his reflection of the crisis (*excerpt, page 19*). He wrote the 305-page book, *The Farm Debt Crisis of the 1980s*, so that the lessons learned "will be identified and memorialized." Is it a surprise that he cranked it out in five weeks, almost exclusively on Ozarks vacation time? "In this case," he told Darlene, "I lived the movie before I wrote the book."

▲To economic material: Harl conducts his all-day estate planning seminars without notes. He'll instruct participants to, say,

Often asked, and occasionally tempted, to seek public office, Harl resists. "That's when you take a cold shower and get back to work," he says.

locate key ruling No. 8739405, then point out on what page — and where on the page — it's found. With a schoolboy's grin he'll peek out of the corner of his eye to watch listeners shake their heads in marvel. It's the same in his ISU classes. "Before you take [Econ 451], you're sure you're going to walk in and be blown away by Dr. Harl and all his material," says recent grad Smith. "He moves so fast and covers so much, he makes you work. But he relates it so well, with an amazing amount of detail."

For Harl, there is no credibility without detail. "And," he says, "there's nothing worse than not being credible." A misplaced comma would not be credible. "Sheer pain," he says, wincing. His lecture trademark is an elaborate slide presentation; he actually has a slide of his own heart during surgery. "When I started in this business, I was so worried about mistakes," he says. "With the slides, that's not likely. That's how I stay on top of things."

But, ah, my foes, and, oh, my friends ...

Guideposts

In prefacing **The Farm Debt Crisis of the 1980s, *Neil E. Harl writes that "the lessons learned ... are lessons for the next period of financial trauma. The lessons of the 1980s must be left etched on guideposts that will survive the intervening years." These, then, are the etchings left by Harl.**

1 The danger in aberrational conditions. Decision makers can be lulled into economic complacency and confidence by forces that appear permanent but are clearly not sustainable.

2 Capacity of creditors to broker losses. Unless losses come too quickly or in too large an amount, lenders may be successful in "brokering" them to several participants. If losses do come too quickly or in too large an amount, lenders fail.

3 The necessity to restructure debt. In the face of serious and widespread economic difficulty, the restructuring of debt — including stretching out principal payments, reducing interest rates and even forgiving principal — may be far preferable to the debtor, for the lender and for society generally than is the insistence that obligations be paid in full and the pretense that in fact they can be paid.

4 Better data and analysis needed. Accurate, up-to-date information on the financial condition of farmers is absolutely critical if the economic and financial condition of the farmers is to be effectively monitored.

5 Vulnerability of agriculture to high interest rates. Agriculture's vulnerability derives from the relatively high level of capital intensity in the sector and the relatively low rate of return on assets. That combination ensures that agriculture is heavily impacted domestically by changes in the interest rate so long as a substantial component of the capital utilized is debt capital rather than equity.

6 Financial stress extended to advisers. Attention should be given to the development of arrangements to assure needed professional assistance (attorneys, accountants, psychiatrists and others).

7 Basic family needs of debtors should be met. Greater recognition of the need for family assistance in terms of assuring the basic needs for survival (food, shelter, clothing, medical assistance), school costs and family counseling is vital.

8 The hazards of nondiversity in loan portfolios. To the extent agricultural lenders cannot achieve diversity and cannot build sufficient reserves, problems can again be anticipated on the occasion of the next economic downturn for the sector.

9 The farm debt crisis was a systems problem for the entire rural community. The farm debt crisis of the 1980s was a problem for every person and business and every agency of government associated with agriculture.

10 The merits of prudence in lending. Low-cost capital induces overproduction in the aggregate and encourages greater use of capital by individual farmers with the result of increased vulnerability to financial distress.

11 The need for a team effort by the USDA and the state universities. It is reasonable for society to assume a modicum of cooperation and teamwork. Unfortunately, that was not the case in the 1980s.

12 The importance of a reservoir of good will and support in the non-farm sector. There is a belief deeply imbedded in the American culture that a healthy food-producing system, organized around a family farm structure, is an important component of a well-fed people. The experiences of the 1980s reaffirm the importance of that objective.

Harl has made a career — no, make that a life — out of staying on top of things. "That's what I watched growing up — a guy doing everything he could to stay on top of it all," says Brent Harl. "That rubbed off on me, and I'm thankful. I may not put as many hours into my work, but I'm after the same level of reward. It's just that being an academic expert requires so much time if you're going to be at the absolute apex. And that's the only place he would let himself be."

On top of things. His classes, his seminars, his writing, his policy work — Harl is the engine, the fuel, the steering mechanism for Harl. Dennis Starleaf is chair of the Department of Economics, but says Harl "is pretty much self-directed. It's his agenda."

Never was this control more apparent than during the farm crisis. He not only predicted the turmoil, but he pointed fingers and offered solutions. Federal Reserve inflation-halting action in 1979, tax cuts in the '81 tax bill, years of "questionable inflation management" and the gluttonous federal deficit all pointed, he warned, to disaster. Though a registered Republican, he lambasted the Reagan administration. That act initially stoked conflict within the Harl machine. Harl's father, a notoriously driven farmer who died of a heart attack at age 69 in 1977, was a steadfast Republican who despised crooked corn rows and slackers only slightly less than the New Deal. But Neil Harl separated economist from son. The '80s were not the '30s. In testimony before the House Joint Economic Committee he termed the Economic Recovery Tax Act of 1981 and the resulting federal deficit "the most irresponsible Congressional action in the history of the Republic." Governor Terry Branstad's office called one day with a message from the White House: "We don't know who this Harl guy is, but tell him to knock it off." Harl basks in his glib response: "Great, at least we have their attention."

Numerous politicians, farm lenders and farmers said he was getting too much attention. One said he must've been on drugs. A Federal Reserve official said Harl's arguments lacked "economic validity." In July 1984, Secretary of Agriculture John Block was quoted in the Register as saying, "Farmers generally remain in good financial condition ..." He would see things differently before leaving Reagan's cabinet in 1986, but still thinks Harl and others contributed more to the problem than the solution. "You make problems worse by voicing them over and over," says Block, now president of the National American Wholesale Grocers Assocation. "Playing the record again and again and again. It became a self-fulfilling prophecy."

Harl played the record until Washington listened. He was relentless not only in predicting doom but in crafting solutions. He pushed his debt restructuring program throughout his midnight ride. And he was vindicated: Reagan's program closely resembled the so-called Harl Plan. "When it came right down to it," Block says in retrospect, "we had to [restructure the debt]. Those restructuring efforts probably helped get us through it as much as anything."

With such history on his side, a knee-high vita and a tapestry of contacts, it's not surprising Harl often is sought for public office. He has been tempted — in 1985 he let his name be thrown into consideration for Iowa State's presidency. But each time his thoughts drift to governor, senator or ag secretary, those magical words — control the agenda — creep in. "That's when you take a cold shower and get back to work," he says.

Says Cooper Evans, a former Iowa congressman and agricultural adviser to President Bush, himself a regular on the list of potential ag secretaries: "He could make major contributions in Washington, sure, but politics can be frustrating. There aren't the rewards Neil is used to. He'd have to give up a great deal."

Even Harl, a man who has crammed several professional careers into one lifetime, fantasizes about "living life multiple times." As he was unceremoniously reminded during the '85 ISU presidential search, he hasn't a speck of administrative experience. There are days when he'd sorely like to change that. Since he zoomed directly from law degree to Ph.D. to tenured professorship, he's never tried a case. "Now there'd be an intellectual challenge," he says. *L.A. Law* will have to suffice. Politics may have limitations, but it attracts the bright spotlight he cherishes so. And there's farming. He now owns most of the old Harl farm, but any hopes of working it were dashed on the 1958 day when the father realized that the son's aspirations were too big too fast for a comfortable partnership.

Dreams, all. For all his energy, his drive and his intellect, Harl has but one candle to burn. But as he once replied when a friend admonished him to heed his heart's formidable warning, "When Harl's time is up, he'll look back and see that life was good."

It gives a lovely light.

No matter how far his economics wizardry takes him, Harl maintains that "there's something about farming that can't be replicated."

Faith in the Land

Growing up on an eastern Iowa farm, Rhonda Yoder knew there was something different about her Amish neighbors. It went beyond the way they dressed and the unassuming way in which they went about their business.

She was most struck by their seemingly "outdated" agricultural practices. "I noticed they were different," says Yoder, a Mennonite who grew up near Kalona. "But I also noticed how stable they were."

That stability became glaringly apparent during the 1980s farm crisis. While mounting debt drove thousands of "modern" farmers off the land, the Amish seemed to sustain little damage. In her 1990 master's thesis, "Amish Agriculture in Iowa: A Preliminary Investigation," Yoder set out to document some of those observances.

"The Amish system ... is especially relevant to current issues in the areas of agricultural research, agricultural policy and sustainable agriculture," she wrote. During five months of research — she lived and worked in an Amish community near Hazleton — she found that only two farms out of 180 were sold during the crisis.

"Many things set [the Amish] apart, but one of the most striking aspects is their family and community structure," says Yoder, who received her ISU bachelor's degree in 1987. "Many of their decisions are based on the community, not just an individual trying to make money."

Practices common decades ago — land stewardship, small farms, sparse use of chemicals and high-tech equipment — enable the Amish to earn decent livings without taking on overwhelming debt loads. The Amish don't have a special name for it, but "sustainable agriculture" — practices taking farmers back to the future, as it were — has been a hot phrase in Iowa State agricultural circles for several years. Why? Too many mainstream farmers, Yoder says, are heavily indebted because of their focus on increased production: More acres, more crop specialization (namely corn and soybeans), more chemicals and pricey equipment. Those practices not only increase debt, they also taken a heavy environmental toll.

JON VAN ALLEN

Rhonda Yoder

"Success to [the Amish] is maintaining their families and communities," Yoder says. "They want their children to continue the tradition. To do that, they have to leave the land as it is."

Yoder hopes more conventional farmers notice the Amish stability. "It looks grim for the family farm, but there's hope," she says. "[The Amish] prove that the family farm needn't be a memory."

—D.D.

PHOTOGRAPHS BY ANDRE DE WET

ENGLISH LESSONS

Like in a scene from *To Sir, With Love,* Iowa Staters studying abroad learned volumes from an inner-city London school. Tom Emmerson reports

FROM THE ASPHALT PLAYGROUNDS OF inner London to the grassy knolls of Iowa State University: Thank you.

That's the message from Islington Green School to six Iowa Staters (including two alumni) who spent part of their fall semester in London helping students in reading, math and physical education. School children received extra individual attention, teachers taught a little more effectively and volunteers got some fascinating insights into London life and education.

The volunteer effort was conceived and launched last fall in an effort to bridge a gap in the London semester study program jointly sponsored by the six Regents' institutions of Iowa and Arizona. About 85 students spent fall 1990 taking courses taught by a mixture of Arizona/Iowa and British professors (myself included) at the University of London Union (ULU) in Bloomsbury, just behind the British Museum. Eight students were enrolled in the program through Iowa State last fall.

Although study abroad sounds inherently multi-cultural, it is not always easy to integrate with foreign nationals, even when they speak approximately the same language. The British, for their part, are somewhat reserved, while Londoners are very much big-city dwellers who are as unlikely as New Yorkers to speak to strangers on the sidewalks, in the launderettes or on the subways.

Pub conversations are much easier to initiate, but don't often produce sustained friendships. In some cases, the result is just the opposite, particularly around the ULU pub where there lurks a certain breed of British student whose favorite activity is engaging in verbal combat with Americans who aren't as well-read on international affairs or politics.

The problem of establishing ongoing contacts in London is complicated by the fact that the Arizona/Iowa students mainly are housed together in flats or dorms. Quite naturally, as they make new friendships with their American classmates, they socialize together and, as a result, tend to travel from place to place, much like a naval convoy under one flag. Not everyone on the program minded this, but some of the students soon realized that a special effort would be required if they were going to get to know some Brits seriously during the semester.

Here is where volunteer work should fit in. But students simply weren't responding to notices asking them to sign up if they were interested.

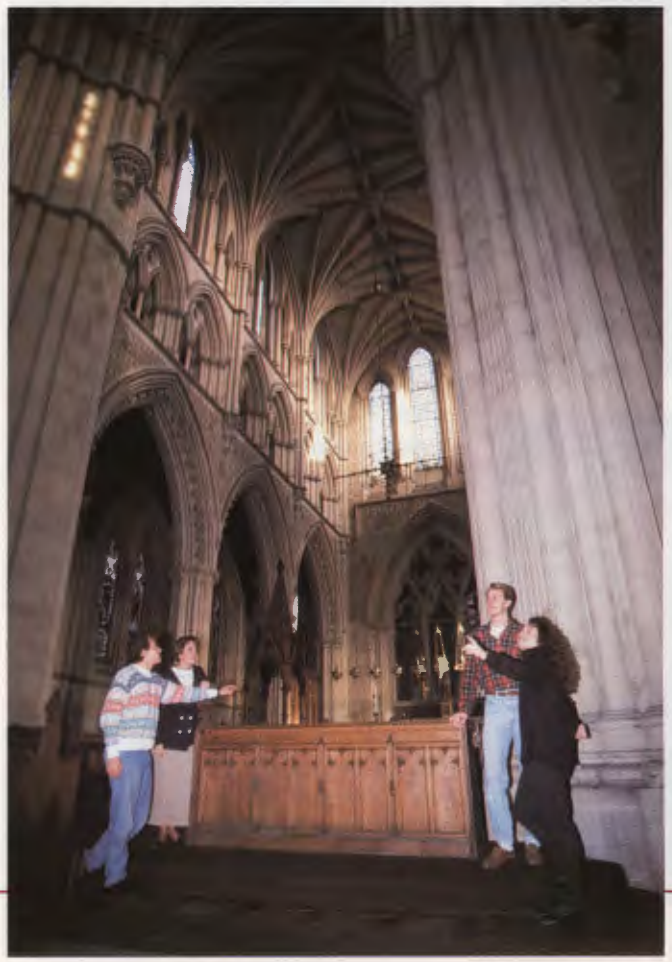
Out of 320 American students in London under the aegis of the American Institute for Foreign Study (including the Arizona/Iowa contingent), only 10 did any volunteer work during the semester outside of Islington Green. It was clear that a specific program was needed that could be promoted in the classroom directly to the Arizona/Iowa students.

Above: Checking out the Fleet Street competition are Nicole Ridgway, Tom Emmerson, Drew Hack, Stephanie Stone and Jennifer Nelson.

Upper right: Journalism major Diane Galligan assists an Islington Green student in tackling a reading assignment via computer.

Right: Taking in London's historic cathedrals was part of the personal curriculum for Nelson and Steve Mumford (foreground), Hack and Ridgway, as they toured the Church of Christ the King near the University of London Union (ULU).

Far right: Mumford, Nelson, Hack, Ridgway and Stone hit the zebra crossing on their way to ULU.



It would be inaccurate to say that most of these youngsters have enjoyed many advantages during their first 12-14 years of life.

The choice of Islington Green was straightforward: Linda and I knew about it because our 15-year-old son, Jonathan, was attending the school during his semester away from Ames High. And while we were enrolling him, we noticed a sign asking for volunteers to help in the school.

Islington Green, boasting 690 students and teachers, is a non fee-paying school for boys and girls between the ages of 11 and 16. It is one of just two mixed-sex schools out of the nine controlled by the Borough of Islington Educational Authority. Islington Green is also one of inner-London's "most thoroughly multicultural schools," according to Deputy Headteacher John Challinor. School administrators recently calculated that 50 different languages or major dialects were spoken by Islington Green students — half of whom are not white British.

It would be inaccurate to say that most of these youngsters have enjoyed many advantages during their first 12-14 years of life. Some have already lived in two or more foster homes; many are from single-parent homes; more than half are entitled to free school meals. A good number have experienced racial discrimination as a matter of routine and make it a point to stay away from parts of London where they know they are "not welcome."

It would, however, be an equal overstatement to say that these youngsters were unintelligent or hardened street warriors. Most of them are doing OK within the limits of their education, and some will stretch those limits significantly.

Serious crime or violence is not the norm at Islington Green — though four years ago, the school had a "very bad" problem, according to Deputy Headteacher Challinor, when a group of 15-19-year-old "villains" used the after-school Youth Centre as a base for their operations. Since they were ousted (and the Centre closed), the school's primary disciplinary concerns have been bullying, racial taunts and theft.

It doesn't take long to realize that the inmates are not in charge of the asylum, thanks to a vigilant staff under the strong direction of Christine Peters, who is in her second year as head teacher. As a result, the students tend to be boisterous, but generally good-natured and friendly, even polite to outsiders. However, the decibel level and degree of backtalk in the classroom would probably surprise most American school teachers.

Above: Mumford instructs Islington Green students on the fine art of the three-pointer during his routine after-school volunteer basketball coaching.

Right: Islington Green Head Teacher Christine Peters and Deputy Headteacher John Challinor visit with Emmerson. Challinor coordinated the volunteer program for IGS.

About half of these youngsters will drop out when they reach the legal school-leaving age of 16. For an inner-city school, keeping half the students pursuing an education is considered a significant achievement. In this respect, Challinor says, Islington Green is unusual because teachers "very actively promote further education — more than they do employment opportunities."

That effort is doubtless one reason why Islington Green exam results are better than most schools in the 11 boroughs that make up inner London. And, unlike most inner-city schools, Islington Green began the 1990-91 academic year with all of its teaching positions filled.

Before our volunteer project could be launched, it had to be cleared with teachers, who were enthusiastic once they were satisfied that our students would serve under their direction. Of the 16 Americans involved, four were Iowa State students: Diane Galligan from Lawler, Steven Mumford from Cedar Rapids, Nicki Ridgway from West Des Moines and Stephanie Stone from Des Moines. All are majoring in journalism and mass communication. Linda, '59, and I, '60, also helped, as did Melanie McFarland from Utah, who is married to the nephew of Dr. Ernie McFarland, one of the founders of the McFarland Clinic in Ames.

Most volunteers worked once a week for 90 minutes, helping students with their reading and writing, though McFarland logged as many as 12 hours per week in the art department. Stephanie and Nicki worked in the classroom alongside a teacher. They answered student questions and generally assisted in keeping the classes' interests. Diane and Linda were involved in one-on-one tutoring of youngsters who were removed from other classes (such as shop or creative writing) in an effort to improve their basic reading abilities. Linda also worked twice a week with Jibril, a 12 year old from Eritrea who not only did not know the full English alphabet, but who also was illiterate in Eritrean before his parents moved to London one year ago.

Steve also did double duty on Thursday afternoons, helping first with math classes and then joining Scott Laumann (Northern Arizona) and me to "coach" basketball after

"They all call me 'Miss.' Wow!"

–STEPHANIE STONE

Far left: Hack and Ridgway check out a traditional red London phone kiosk.

Left: Linda Emmerson, '59, tutors Jibril in English. Jibril arrived in London from Eritrea one year ago.

school until 5 p.m. Actually, we mostly played ball with them, slipping in coaching tips on the side. Mumford and Laumann took the 15-16-year-old boys, while I worked with the girls (mainly 13 year olds) and some of the younger boys. No one needs to fear British basketball for a few more years. But what the youngsters lack in shooting skills, they make up for in enthusiasm and desire to learn.

Volunteer Dave Vogel from Arizona taught 20-25 students American football during P.E. class. In addition to learning fundamentals and rules, they also discovered that, as one student put it, "American football hurts."

In fact, it was the popularity of football that generated some mild criticism of the volunteer program. One parent complained that his son had become more interested in American football than in his music lessons. And a few parents told Challinor that their youngsters were hounding them for expensive American football gear for Christmas.

But overall, considering that this was a first-time experience for everyone, the evaluations were excellent on every count. All 10 of those volunteers who returned questionnaires rated it an excellent or good cultural experience. All but one said they would either recommend or absolutely recommend it to U.S. students next semester. The project also scored well with the volunteers in terms of both significance and fun/enjoyment.

As Diane Galligan put it, "Besides being a great way to see the interesting differences between U.S. and British schools, it was very rewarding personally to work one-on-one with a student who needed help." Stephanie Stone also found it "very interesting," but was equally impressed by the fact that "They all call me 'Miss.' Wow!"

The teachers at Islington Green liked having "the Americans" for at least three reasons. First, they increased the amount of teaching that could be accomplished; second, they provided added stability in the classroom and third, they helped the students broaden their horizons beyond the Borough of Islington.

Perhaps the most important contribution in sports was the emphasis placed on teamwork and cooperation. And, of course, there are a lot worse things that can happen after school than to have 25-40 boys and girls chasing basketballs in pursuit of the elusive two-pointer.

Students at Islington Green also liked the project, judging from comments they made to the volunteers and teachers. As Nicki Ridgway saw it, "They seemed to really appreciate the help and getting to know us." They were anxious to learn about the United States and surprised to discover that Main Street isn't Hollywood.

By the end of the program, youngsters being tutored did not have to be reminded or fetched for their lessons. In fact, most were at the appointed spot waiting for their tutors to arrive. Jibril even left one session smiling — a first, according to special needs teacher Vicki Simmons.

Just about every volunteer developed strong ties with some students and a teacher or two. Melanie McFarland and her husband hosted two teachers from the art department for Thanksgiving dinner. Two students made a thank-you card for Nicki Ridgway, saying how much they would miss her. And when one of the volunteers from Arizona had to return home unexpectedly, one of her main concerns was to make sure that someone would say goodbye for her to David, her special student friend at school.

Judging from previous participants, most of last fall's students would agree emphatically with D. Samuel Johnson that "he who is tired of London is tired of life." That would be especially true of the Islington Green volunteers. It would hard to imagine them not being drawn back to the school whenever they visit London again.

To David (for Kristin), Silvy, Nadine and Bimpe, Tim, Tom, Ayo and Imran, as well as Harry, Julie, Jibril and all of the others: Thank you. You taught us a lot.

Tom Emmerson, who received degrees from Iowa State in 1960 and 1963, is chairperson and professor of journalism and mass communication at ISU. His first piece for VISIONS, "He who laughs, lasts," appeared in Summer 1990.

PHOTOS BY JIM HEEMSTRA

PREHISTORIC PITCHMAN

He's a '90s impresario with an evolutionary agenda, turning ancient history into the greatest show on earth

It's 7:45 a.m., not too early for DeVere Burt to flash the P.T. Barnum side of his personality. "There are some incredible things on the way," he is saying; things that could attract "millions of people."

The executive director of the Cincinnati Museum of Natural History is interviewing a candidate for director of visitor services. But Burt's doing most of the talking as they sit in the Founders Room at 1720 Gilbert Ave.

"I'm thinking of someone with lots of energy and enthusiasm for the project," he tells her. The "project" is the museum's new home, Union Terminal.

A few minutes later Burt whisks through the basement of the old museum, which is being renovated into a state-of- the-art collections and research facility. "There's absolute turmoil, really," Burt says, passing life-size models of baby dinosaurs.

He hops into his black Taurus. His schedule this day, like most days, is packed with meetings that mean shuffling between Gilbert Avenue and Union Terminal. The owner of two Iowa State degrees has been museum director for 15 years; the last five or six, he says, have been a blur.

DeVere Burt outside the Museum Center in Cincinnati.

Things came into focus last November when portions of the Museum Center at Union Terminal opened. The renovated Art Deco railway station also houses the Cincinnati Historical Society Museum and Library, and the Robert D. Lindner Family OMNIMAX Theater.

"I think he's given [the museum] a national reputation," Helen Black, chairperson of its board of trustees, says of Burt. "I think the new museum in the terminal will be world-class."

"When this is a done entity," says John Ruthven, a noted wildlife artist and museum trustee, "(Burt) will be the man of the hour."

This morning, though, Burt's a tour guide for a job prospect. For months, he has been walking people through the massive landmark, which has floor space equal to 14 football fields.

He takes off his shiny black Florsheims in the parking lot. "I've ruined a couple pair already," he says, slipping on a pair of dusty brown loafers. He's wearing a pressed white shirt, tie, black trousers, glasses, full beard and hard hat.

At 49, he walks fast and talks fast, occasionally punctuating sentences with a hearty laugh. When colleagues describe him, they use such words as creative, enthusiastic, hands-on, energetic.

"I don't know where they plug him in at night," says Sally Woliver, the museum's deputy director for development and communications. "He has not slowed down. He has that glimmer in his eye."

His tour under way, Burt pauses in the terminal's rotunda where visitors' eyes immediately are drawn to large, colorful murals of Cincinnati. "This is the grandest museum lobby in the world," he proclaims.

In the Children's Discovery Center, which opened in November along with a "Dinamation" exhibit, Burt stops to describe a Dr. Digesto pinball machine that will teach kids about digestion. When the ball is eliminated, the player will hear the sound of a toilet flushing. "Museums are not stodgy institutions, but they've got that reputation," he says, heading toward a limestone cavern exhibit scheduled to open this year.

Burt can't leave the cavern without launching

By John Johnston **Reprinted by permission of the Cincinnati Enquirer**

Burt and a staffer look over the museum's permanent collection of birds from around the globe.

into an explanation of "dome pits," or vertical shafts. Later, he stops at a model of a saber-tooth cat to describe that animal's fearsome killing capabilities. Around every corner, he's giving an extemporaneous lesson on something, be it glaciers or ground sloths. He finds science exhilarating, and within the concrete walls of Union Terminal, Burt sees a grand opportunity to excite others. His philosophy is simple: "If we're going to wake kids up, we've got to entertain. We're not Disneyland and don't profess to be. We're here so kids can learn. But there's nothing wrong with having fun while you're doing it.

"We're interested in scientific literacy. I think the worst thing you can do is present exhibits under glass with signs that say: *Don't touch; stand back; hands off.*"

An Ice Age exhibit, set to open later this year, originally was designed as a paleontologist's dream — and a kid's nightmare. It was changed so children could understand it.

"We've been to a lot of glaciers," he says, standing by Styrofoam molds that will one day resemble icy walls. "I think we understand them. They're as close to the extraterrestrial as you can get on this planet, except the deep sea. They're gorgeous."

Burt knows first-hand. For if there is some P.T. Barnum in him, there is an equal part Indiana Jones. The Ice Age exhibit will be realistic in large part due to expeditions such as the one Burt and others took four years ago to see the caves and glaciers near Alleria, Canada. On that trek, Burt dropped a water bottle, went to retrieve it and fell about 50 yards down the slope of a glacial moraine, where rocks ranged from the size of peas to Volkswagens. "It was a wild ride," he says. "I had an awful time getting out of there."

But that was a cakewalk compared to a grueling hike in the Philippines 18 months ago. Burt and wildlife artist Ruthven spent 11 days on a month-long expedition organized by Robert Kennedy, the museum's deputy director of collections and research. The goal: Visit a remote, largely unexplored cloud forest (a high-elevation rain forest) in the mountains of the island of Panay, and find a new bird species, the Panay striped-babbler.

Near the start of a 25-mile hike, Kennedy watched as Burt and Ruthven, bracing each other for support, crossed a riverbed swollen by a flash flood. "I said to myself, 'Bob, you shouldn't let them do that,'" Kennedy recalls. "If they had tripped and fallen, it probably would have been all over."

They survived, of course, only to face a trek through 6-foot grass up a mile-high mountain in 100-degree heat with no breeze. At 2,000 feet, Burt began seeing spots and getting chills. He had dehydrated. Ruthven, the trip's eldest member by 15 years, also battled exhaustion. "I said, 'DeVere, I am not going any further,'" Ruthven recalls. "But DeVere was going to press on anyway, even though he felt he was in a very difficult physical state at the time." The next day, in torrential rains, they caught up with the others.

Says Kennedy: "The remarkable thing is there was never a complaint, never a cross word, (such as) 'Why did you get me into this, Bob?' Their spirits were high the whole time, under extremely rigorous conditions."

Adding to the intrigue and danger: The presence of communist guerrillas. "They walked into camp the first day with their AK-47s and established who was in charge," Burt says. Such distractions aside, the mission succeeded. The researchers found the striped-babbler, along with several new subspecies.

Burt says he was fascinated by the cloud forest. "I'm so happy I've had a chance to see it because when it comes time to fund raise [for a touring exhibit in four or five years], I can get very enthusiastic about having been there and gotten soaked and perpetually wet for 11 days."

He returned 17 pounds lighter, his toenails gone and the skin stripped from the bottom of his feet, the result of a fungal infection. "He was a sight to behold," says Pat, his wife of 13 years.

She has accompanied him on less rugged trips to Alaska and Africa. Dangerous expeditions worry her, but she is supportive. "He needs to do that kind of thing, she says. "That's part of him. He could get killed going to work every day. It's a lot more exciting to fall off a mountainside."

At that, her husband roars with laughter.

The Burts live in a stone house where examples of DeVere's pen-and-ink, pencil and acrylic wildlife scenes hang on several walls. It's a far cry from the work Burt did while working his way through graduate school at Iowa State as a biological illustrator. For 18 months, he pored over several thousand line drawings of fleas.

"It was awful," he laughs. "Genitalia of fleas. It's definitely not kinky, believe me. Very boring."

He's an accomplished artist who has done commissioned work, but he hasn't pursued it for nearly a decade. "It just takes a lot of energy," he says.

Union Terminal saps much of that energy, but he occasionally finds time to tinker with cars. The son of a Lincoln Mercury dealer, Burt is as comfortable discussing the mechanics of a Mustang as, say, the homing abilities of pigeons, 50 of which he keeps in his backyard. His fascination with the birds is obvious as he rattles off their unique characteristics: an internal biological clock and sun compass; an ability to see polarized light and to hear sound waves humans can't; an incredible visual memory and sense of smell.

Burt's pigeons once flew from Little Rock, Ark., to his back-yard landing board — a distance of 539 miles — in less time than a person can drive it. And the birds had never been there before. "It's more play than serious work," he says, "although the kind of information I'm keeping is publishable. Someday, I'll do it."

Science and nature have intrigued him since he was a kid exploring his grandfather's Iowa farm. "My earliest recollection of childhood," he says, chuckling at the thought, "is muddy feet under the kitchen table. I'd been in glacial marsh out in the pasture, playing in mud, chasing leopard frogs."

He earned degrees in wildlife biology (bachelor's, 1966) and animal ecology (master's, '70) at Iowa State, then got a job with the Nature

Burt confers with one of the museum's 270 volunteers,

Conservancy. He spent a year in Washington, D.C., before moving to Cincinnati. He joined the history museum's staff in 1973 and six months later was named associate director. When Ralph Dury retired as director in January 1975, after 56 years, Burt, then 32, replaced him.

In a Cincinnati Enquirer article announcing his promotion, the young director said his long-term goals included expanding the museum's volunteer program, increasing membership and stimulating interest in the natural sciences. Fifteen years later, Burt says, "We're not anywhere near where we want to be, but we've made a lot of progress, and that's due to the hard work of a lot of people."

Progress can be measured by the volunteer staff, which has more than doubled, to about 270. Membership, at 1,700 in 1981, now stands at 6,300. And staffers can't keep up with the demand for educational programs, 175 of which were offered last year, up from 15 in 1980.

When Burt arrived, the museum had no scientific staff and only nine employees. Today the 100-member staff includes experts qualified to catalog, curate and exhibit the three-million-piece collection. During Burt's tenure the museum also has taken a prominent role in research, through such projects as the Philippine expedition. "If DeVere had not arrived, I think we would be wholly a spectator museum," Ruthven says.

Admission numbers have remained fairly stable at 200,000-250,000 annually; museum officials attribute that to conditions that led to the move to larger quarters: a severe lack of space, limited parking and no climate control.

his one involved in painting a saber-toothed tiger.

By year's end, this construction area will house the museum's new Ice Age exhibit.

The challenge then became how to bring two similar, yet distinct institutions together under one roof. Turf problems were inevitable. "When we didn't agree, we knew why we didn't agree," says Gale E. Peterson, director of the historical society, and himself an ISU graduate (1965). "Disagreements never became a problem."

Among Burt's chief concerns, Peterson says, was whether the historical society, which then had no exhibition program and no museum staff, could bring as much to the partnership as the natural history museum. And neither man felt comfortable sharing sensitive information such as donor lists and fund-raising strategies. Burt calls it "getting naked and looking at each other. I've had all my fears absolutely vaporized by the plan they [the historical society] have produced, by the caliber of people they've employed," he says.

Throughout the process, the directors developed a mutual respect. "He's a terrific guy," Peterson says.

And a driven one.

"My wife will tell you, this (Union Terminal project) is a little tighter marriage than our own at this point," Burt says. "It's seven days a week."

To which wife Pat adds, "Sometimes it's eight days a week."

It's a weekday evening, and the Burts are home with Shamba, their 9-year-old female greyhound, who relaxes on the family room floor. (Burt has two sons from a previous marriage.) Away from the hectic pace of Union Terminal, DeVere, too, looks relaxed. He's usually in bed by 8 p.m. He'll read a couple of hours, then fall asleep no later than 10. Most mornings he's at work by 7.

The completion of Union Terminal isn't likely to change those habits much.

"He isn't going to slow down." Pat says. "He's kind of like the exhibits they used to have behind glass, and you'd be careful which button you'd push because the recording would go on forever."

With Burt, it's on fast forward.

"We all feel the speed of the treadmill is established," he says, "and if you want to stay on top, you've got to be fast. You've got to be plugged in to the various networks."

Burt and company already are moving to bring blockbuster exhibitions to town after "Dinamation" winds up its year-long run. "Treasures of Peru," which features more than 400 artifacts, is a possibility for 1993. One museum official describes it as "more gold than King Tut with the same mystique."

Then there's something in the works from Canada's Ex Terra Foundation. The result of a collaboration between Canadian and Chinese scientists, the exhibit would present fossil evidence that North America and Asia were linked at the time dinosaurs roamed the earth. Burt's eyes light up when he talks about the huge outdoor exhibit, which would include tent-like enclosures for actual dinosaur skeletons; transports that would lift people 50 feet up to see the head of a tyrannosaurus and a projected North American visitation of 15 million people in five cities.

"I'd like to be one of those five," he says. "If this exhibit happens, we want it right here." It's one of those incredible things that could bring millions of people to Cincinnati. P.T. Barnum, no doubt, would feel right at home.

And DeVere Burt would make sure he learned something.

M M E D

Above: Deanna and Bill Miller, along with Cassie, return to their rural Farnhamville home every summer.
Above right: Homecoming '90 brought a proud second-place finish for the Kappa/Sigma Chi display, as well as an emotional reunion (right) between "Mom" Miller and a Kappa alumna.

I A T E

Family

DEANNA AND BILL MILLER

TRADED PLOWS FOR PLEDGES WHEN

THEY LOST THEIR FARM AND

GAINED 65 DAUGHTERS

Text and photographs by Leigh Charlton

Eight years ago, Deanna and Bill Miller were driving a new Cadillac, planning to retire by age 50 and grossing more than $100,000 a year in rural Farnhamville. Today, they live in a stately, two-story brick home filled with the laughter of bright, talented young women — about 65 of 'em.

Serving as houseparents for ISU's Kappa Kappa Gamma sorority wasn't quite the Millers' game plan back in the early 1980s, but like many Iowa farm families, they stood by and

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Top: Chef Bill, receiving KP assistance from Delt Jim Gilbert, "could barbecue 400 pounds of meat without a problem when he got here, but he couldn't handle a cake mix," Deanna remembers. Right: Knitting relaxes Deanna after a long day ("although I prefer a bubble bath"). Lower right: Bill reviews the week's menus with Delt Housemother Shirley Ross.

▶▶

Opposite page, top: Delt Mike Belshan drops in on the Millers in their Kappa apartment. Middle: Deanna takes in a movie with house members Amy Richards, Jean Percy, Mandy Bauer, Kelly McKeown, Kara Nelson, Suzanne Engels and Andrea Schmeal. Bottom: Bill smokes meat under Ross' watchful eye.

watched the agricultural crisis destroy their plans for their mid-life years. Visions of "keeping up with the Farnhamville 'Jet Set'" disappeared as quickly as a hailstorm flattens a crop. Left with little more than staggering debts, the Millers were forced to look for another means of support.

"It was Jan. 23, 1983," Deanna Miller, a former high school teacher, remembers today. "I was crocheting an afghan and watching a blizzard outside. In the midst of my reverie, the

phone rang. It was one of our son's friends attending Iowa State, suggesting I apply for a job as a housemother in a fraternity or sorority." By that fall, Deanna, then 46, had moved into the Kappa house at a monthly salary of $500, plus room and board. Bill joined her later that year.

These days, home for the Millers is a three-room apartment off the main hallway in the sorority house, a heavily trafficked area that doesn't prevent them from keeping their door open—and their candy jar filled—nearly around the clock. "The candy is an excuse to drop by; I can tell instantly if a girl needs to talk," Deanna says knowingly.

In addition to their work as surrogate parents to Kappa members, Bill manages his scaled-down farming operation from Ames and serves as cook for the Delta Tau Delta fraternity. "These kids are the top 10 percent,"

▼ Below: Deanna serves as president of the Coterie Association for ISU housemothers. Four of them (Doris Stukenberg, Dorothy Hammond, Miller and Colleen Haug) walk five mornings each week, and another quartet (Wanda Sauers, Bonnie Ukness, Miller and Laura McDonald) play bridge every other Tuesday.

▶▶ Opposite page, top: Kappa Barrie Richards and Deanna instruct handyman Mark Larson in hanging the new composite in the chapter room. Middle: The Millers throw an impromptu pizza party and "My gad, the whole Delt house shows up," Deanna remembers, including Kevin Costenaro, Jim Knaack and Darin Ames with Kappa Kris Bensen.

Bill says with a weary smile after a long, hot day cooking for 70 men. Together with Shirley Ross, the Delts' housemother, Bill plans menus, orders food and even smokes meat for the winter months.

The Millers readily admit that their new life as Mom and Dad to dozens of undergraduate women "has been a lifesaver, emotionally and financially.

"You think all the wounds have healed, but talking about it brings back the hurt and devastation all over again," Deanna says. "It wasn't until 1989 that

we could really see light again. But the farm crisis was a blessing in disguise. If the FmHA [Farmers Home Administration] hadn't forced us to change, we would never have had the opportunity to grow and expand our horizons. We would never have seen Frank Sinatra or the Leningrad Philharmonic; we would never have touched the lives of so many young men and women, or been enriched by their interests and concerns."

"Competition used to drive me," Bill concedes, "but now I don't feel the need to compete with anyone. Health, family and friends are what's important, not money. I'm happy with who I am inside." ◆

ISU Alumni Association continues to grow

JIM HEEMSTRA

Steven Mores

This has been a busy, exciting and productive year for the Iowa State University Alumni Association, and you are each a part of the many reasons for its success.

To begin with, there are more of you—ISU alumni and friends—who have become involved by joining the Alumni Association. We now have more than 38,000 members. Increased membership is the lifeblood of our Association and one of the cornerposts of its recently enacted long-range plan.

That long-range plan is the basis on which we planned for this year as well as the immediate future. Your board of directors and staff were deeply involved in the preparation of the plan, and now in its implementation we have centered our committees around its key points and goals.

Your board has been expanded to include representatives from all colleges of the university, and we are helping each with its individual goals of alumni communication.

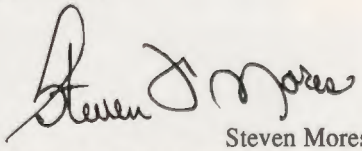
Benefits of membership continue to grow, and while some of those benefits pay their own way, many are funded through regular membership dues. We encourage each of you to talk with alumni who aren't members, and sign them up! Information is always available in VISIONS or from your central office at (515) 294-6525.

One benefit of membership is your opportunity this month to elect the alumni who will lead your association for the next five years. Profiles and photos of the six outstanding candidates are featured on the inside front slipcover. A ballot and instructions for voting appear on the back, so you may return your votes to the alumni office. Winners of the election and new board officers will be announced June 7 at the annual meeting. The current board members and brief profiles are also found in this issue *(page 40)*.

It has been an honor as well as a pleasure for me to serve as president of the Alumni Association, working with 15 extremely talented and dedicated ISU alumni who represent you, the members, most capably. I've had the opportunity to get to know and to work with many enthusiastic ISU graduates and friends, and for this, I'm ever grateful.

Iowa Staters have shown a willingness to donate their time and resources to keep the university and the Association among the finest in the country. We still thrive for perfection, and I'm optimistic about the future for both entities.

My sincere thanks to all of you for supporting Iowa State University and our Alumni Association.



Steven Mores
President, ISU Alumni Association

Memberships can be upgraded with ISU credit card

The ISU Alumni Association is offering annual members with ISU credit cards the opportunity to upgrade to life memberships through the automatic billing program, according to Frankee Oleson, director of membership development.

"By simply contacting the Alumni Association at (515) 294-6525, ISU card holders can change their automatic billing amounts to accommodate upgrades into life memberships in a quick, convenient way," Oleson says. She encourages members to initiate upgrades about three months before their annual membership renewals are due.

Life memberships cost $500, or $100 per year for five years. New life members are recognized in each issue of VISIONS magazine.

Membership in the ISU Alumni Association is your ticket to ...

eligibility for use of the new Recreation/Athletic Facility. Though use of the facility previously was limited to students, faculty and staff, Alumni Association members now also qualify for membership.

Call (515) 294-6525 for information. And remember, this benefit is yours because you are a member of the ISU Alumni Association!

Alumni Days: Turn back the clock.

Alumni Days '91 June 6-8 at Iowa State

A president's reception at the Parks Library will be one of many campus activities highlighting Alumni Days 1991, June 6-8.

The reception, hosted by President Martin Jischke, will be held Friday afternoon, June 7. Members of the classes of 1916, '21, '26, '31, '36 and '41 will be honored at the reception and throughout the celebration weekend. Other activities include the "Sentimental Journey" musical revue at Fisher Theater, the Gold Medal Dinner and the Honors and Awards Convocation.

Members of the honored classes — or members of the classes of 1942, '43 and '44 — with questions about attending Alumni Days '91 can contact Elizabeth Venner, ISU Alumni Association, Alumni Suite, Memorial Union, 2229 Lincoln Way, Ames, IA 50010-7164; (515) 294-6525.

Annual meeting set

The annual meeting of the ISU Alumni Association will be held at 1:30 p.m. Saturday, June 8, in the Great Hall of the Memorial Union on the Iowa State campus. The meeting will follow the Alumni Days 1991 All-Alumni Luncheon. All Association members are invited to attend.

Those wishing to eat lunch at 12:30 p.m. should contact the Alumni Association at (515) 294-6525 by May 31 to purchase luncheon tickets.

NEW LIFE MEMBERS

The ISU Alumni Association welcomes the following new lifetime members who joined during the months of October, November and December. If you would like to convert your membership from annual to lifetime, and receive a complimentary gift, call (515) 294-6525 for more information.

Janet L. and Brian D. Amundson
Charlotte and Albert F. Anderson
Melanie S. and Douglas G. Anderson
Richard O. Angus, Jr.
Nancy K. and Delbert B. Bailey
Elizabeth A. and Douglas A. Barker
Kevin M. Boyce
Jay R. Braden
Jodie A. and David L. Brown
Lori D. and Charles L. Burras
Patricia and David Calderwood
Alice C. and Nan-Chi A. Chang
Sally A. and Jeffrey A. Chapman
David R. Claussen
Candace K. and Gregory Clubb
John B. and Kathleen M. Coppock
Diana J. and Glenn M. Croisswait
David L. Dawson
James G. Dietz, Jr.
Catherine Dietze
Mary A. and Alan R. Dona
Katherine A. and Keith A. Ervin
Patricia E. and Paul D. Farris
Elaine A. and Randall G. Franck
Roderick S. Galloway
Sally D. and John H. Greve
Roger K. Grundmeier
Jean A. and Walton J. Hammar
Tamera L. and Howard L. Harris
Sylvia L. Hauser and Amir J. Rakha
Chris A. Hoffman
Deborah W. and Frederick Hopkins III
Cecilia A. and Harry T. Horner, Jr.
Julie K. and Jay S. Jacobi
Beverly S. and Bradley G. Jensen
Gregory T. Johnson
John M. Kaiser
Earl D. Katzer
Carla J. and William M. Klittich
Kristine M. and Terry G. Knoke
Yongsu Kwak
Brad A. Lane
Mary L. and Leon A. Larson
Zong-Shin Liu
Andrew H. Mathis
Janet S. and Donald B. Metcalf
Preecha and Aporn Ngovi-watchai
Paula M. Oberender
Sang Ro and In Ja Park
Cheryl J. and Gary A. Petersen
Rebecca E. and Byron C. Phillips
Judith W. and Charles W. Pike
Lisa A. and James B. Prohaska
Julie S. and Regis D. Rulifson
Mark G. Schmitt
Sheila K. Seitz
Kay R. and Ronald L. Sirpless
Cynthia T. and Thomas M. Stark
Linda F. Steensland
Martha S. and Eddie W. Stroud
Steven J. Sweeney
Evelyn I. and Richard F. Teegen
Eileen A. and Donald L. Wagner
Lori A. Williamsen
Steven O. Wright
Betsy L. and Mark D. Yanike
Masanori Yokoyama
Brigid A. and Daniel M. Youngblade

WHERE ARE THEY NOW?

The ISU Student Alumni Association program has spawned some of the university's most innovative and productive young alumni. VISIONS catches up with an SAA alum in each issue.

JANE HOFFER

Melissa Lewis Neborak

Student Ambassador, 1982-83

Age: 28

ISU degree: Journalism, 1984

Job title and description: Manager of tickets and special events, ABC, New York. Coordinates events for advertisers to coincide with annual meetings and major ABC sporting events like the Super Bowl, World Series and Kentucky Derby.

Hometown: Newton.

What I like most about my job: Traveling to new cities and becoming familiar with them, their people and the corporate executives who are clients of ABC.

Favorite sporting event: 1988 Winter Olympics in Calgary.

Most memorable sporting event: Game 2 of the 1989 World Series in San Francisco. I was in a car in the parking lot when the earthquake hit!

If I weren't doing this I'd be: Working in front of the camera as a TV reporter or anchor.

In 10 years I hope to be: Financially secure and spending my days on the beach.

What I miss most about Iowa State: The parties and the friendly people.

The best thing about living in New York: The unlimited number of activities available.

Persons I admire most: The allied forces in the Persian Gulf.

Last book read: *Liars Poker*, by Michael Lewis.

Favorite ABC series: *thirtysomething*, *Doogie Howser, M.D.* and *Roseanne*.

ARTICLES OF INCORPORATION

The annual meeting of the members of the Iowa State University Alumni Association will be held on the 8th day of June, 1991, in the Great Hall, Memorial Union, Iowa State University, Ames, Iowa, at 1:30 p.m. At the meeting, a vote will be taken to approve the adoption of the following Restated Articles of Incorporation, which include all amendments voted by members in 1975, 1986, and 1990.

ARTICLE I
NAME

The name of the corporation is Iowa State University Alumni Association. The effective date of its incorporation was the 15th day of June, 1932. Its original name was Iowa State College Alumni Association.

ARTICLE II
PURPOSES AND OBJECTS

This corporation is organized and shall be operated exclusively for charitable, educational and scientific purposes, including, but only for such purposes:

1. To promote the social, moral and material welfare of Iowa State University of Science and Technology (hereinafter referred to as Iowa State University) and of its faculty, graduates, students, former students, parents and friends;
2. To receive, use, manage and administer gifts, grants, bequests and devises and to distribute income and/or principal for such purposes;
3. To establish, maintain, manage and administer a trust fund to be known as "The Iowa State University Achievement Fund" and to receive gifts, grants, donations, devises and bequests to become a part thereof, and to invest, manage and administer all monies and properties so received, and to disburse and dispense the same, and income therefrom, solely for the purposes of The Iowa State University Achievement Fund;
4. To establish and maintain a trust fund to be known as "The Endowment Fund" and to receive gifts, grants, devises, bequests and contributions to become a part thereof and to manage, invest, administer and distribute the same and the income therefrom; and
5. To establish and maintain such other trust funds as the board of directors deems appropriate for the carrying out of the foregoing purposes.

ARTICLE III
DURATION

This corporation shall have perpetual duration unless sooner dissolved.

ARTICLE IV
MEMBERS

The members of this corporation may be individuals, corporations, associations and other organizations. Where the membership is in a corporation, association or other organization, the governing body of each such member shall designate one individual who shall be deemed to be its duly authorized representative at all meetings of members of this corporation. Such person shall be recognized as the duly authorized representative until the secretary of this corporation is notified in writing of the revocation of said appointment and of the name and address of the newly designated representative. Membership of this corporation shall be divided into five classes: 1) voting annual members; 2) voting life members; 3) nonvoting "honorary" members; 4) nonvoting "sustaining" members; and 5) voting "sustaining" members.

a. Voting annual members: Any graduate, former student or member of the faculty, experiment stations or extension staffs of Iowa State University may become a voting annual member of the corporation upon payment of annual dues in an amount set forth in the Bylaws or determined by the board of directors of the corporation, and such membership shall continue so long as annual dues in such amounts determined continue to be paid.

b. Voting life members: Any graduate, former student or member of the faculty, experiment stations or extension staffs of Iowa State University may become a voting life member of the corporation upon payment of such amount as is set forth in the Bylaws or determined by the board of directors of the corporation to be the voting life membership dues; provided, however, that all existing life members of the General Alumni Association of Iowa State College of Agriculture and Mechanic Arts shall be and continue to be voting life members of this corporation with all of the rights and privileges of voting life members as provided in these Articles of Incorporation.

c. Nonvoting "honorary" members: Any person who has rendered distinguished service to Iowa State University may be appointed by the board of directors of the corporation as a nonvoting "honorary" member of the corporation.

d. Nonvoting "sustaining" members: Any corporation, partnership or association interested in the work of Iowa State University may become a nonvoting "sustaining" member of the corporation upon payment of annual dues in an amount set forth in the Bylaws or determined by the board of directors of the corporation, and such membership shall continue so long as annual dues in such amounts determined continue to be paid.

e. Voting "sustaining" members: Any individuals or families interested in the work of Iowa State University who are not graduates, former students or members of the faculty, experiment stations or extension staffs of Iowa State University may become voting "sustaining" members of the corporation upon payment of annual dues in an amount set forth in the Bylaws or determined by the board of directors of the corporation, and such membership shall continue so long as dues in such amounts determined continue to be paid.

ARTICLE V
THE IOWA STATE UNIVERSITY ACHIEVEMENT FUND

The Iowa State University Achievement Fund shall be and constitute a trust fund and shall be managed, controlled and administered by a Board of three (3) trustees of which the President of Iowa State University is one, and the other two shall be appointed annually by the board of directors of the Iowa State University Foundation to serve a one year term. In the event of death, resignation or removal of any elected trustee prior to the expiration of the term for which such trustee was elected, the vacancy thus created shall be filled by the board of directors of the Iowa State University Foundation for the balance of the term for which the vacancy exists. No member of the board of directors of the Iowa State University Alumni Association or the Iowa State University Foundation shall, while a member thereof, be eligible for election as a member of the Board of Trustees of The Iowa State University Achievement Fund with voting power.

The Board of Trustees shall at its annual meeting elect from among its elected members a chairman and a vice-chairman, each to serve for a period of one year. In event of death, resignation, removal, or absence of the chairman at regular meetings prior to the expiration of his or her term as chairman, the vice-chairman shall assume the duties of chairman of the Board of Trustees. The Board of Trustees shall elect a treasurer for The Iowa State University Achievement Fund, who shall be under the direction of the Board of Trustees. The Board of Trustees shall prescribe rules and regulations governing the conduct of such treasurer in the handling of said fund and in the disbursement thereof and may require the treasurer, before entering upon his or her duties, to give bond to the corporation with such conditions and in such amount as the Board of Trustees may prescribe which bond shall be subject to the approval of the Board of Trustees. The Board of Trustees shall elect a secretary and a director of The Iowa State University Achievement Fund, prescribe the duties thereof and may require the giving of bond by said secretary and director. Premiums on all bonds required by the Board of Trustees may be paid by the Board of Trustees from income derived from The Iowa State University Achievement Fund. Compensation for the treasurer, secretary and director shall be fixed by the Board of Trustees and may be paid from income derived from The Iowa State University Achievement Fund. Such treasurer, secretary and director may be members of the Board of Trustees.

No compensation shall be paid to the ex-officio members of the Board of Trustees. Elected members of the Board of

Trustees may be allowed compensation by the board of directors in such amounts as may be deemed proper, which compensation shall be paid from income earned by The Iowa State University Achievement Fund. All necessary expenses of the members of the Board of Trustees or any of them, incurred in the performance of their duties, and compensation for clerical help necessarily employed, may be paid from income derived from The Iowa State University Achievement Fund.

The Board of Trustees of The Iowa State University Achievement Fund shall hold an annual meeting at such times as may be set by the Board of Trustees or at such other time and place designated by the chairman of The Iowa State University Achievement Fund Board of Trustees. In addition, the chairman of the said Board of Trustees may call special meetings as and if needed.

The Board of Trustees of The Iowa State University Achievement Fund shall, in the name and on behalf of the corporation, have power to make contracts necessary or proper in the management, administering, preserving and dispensing of said fund, to take conveyance of real, personal and intangible property, to execute deeds, bills of sale and other instruments for the conveyance thereof and to act in the capacity of trustee, to the extent permitted by the laws of the State of Iowa, of other trusts established by the corporation. The power of the Board of Trustees to execute the legal instruments necessary to convey title to the assets of The Iowa State University Achievement Fund may be exercised by joint signature of the chairman of the Board of Trustees and the director of The Iowa State University Achievement Fund on such legal instruments. In addition, the corporation shall have power and authority to sell, transfer and convey title to the assets of The Iowa State University Achievement Fund upon the recommendation of the Board of Trustees of The Iowa State University Achievement Fund and a resolution approved by the board of directors. The power of the corporation to convey title to such assets may be exercised by joint signature of the president and secretary of the corporation on the legal instruments necessary to convey title to said assets.

The office of Chairman of the Board of Trustees of The Iowa State University Achievement Fund and the office of President of The Iowa State University Achievement Fund shall be held by one and the same person and, notwithstanding anything to the contrary in the foregoing Article V, legal instruments necessary to convey title to the assets of The Iowa State University Achievement Fund may be executed by the joint signature of the Director of The Iowa State University Achievement Fund, and the Chairman of the Board of Trustees signing either as "Chairman," "President," or "Chairman and President" of the Board of Trustees of The Iowa State University Achievement Fund. Any legal instruments conveying title to the assets of The Iowa State University Achievement Fund which were previously signed by the President of the Board of Trustees of The Iowa State University Achievement Fund shall be deemed to have been signed by the Chairman of the Board of Trustees of The Iowa State University Achievement Fund in accordance with Article V of the Articles of Incorporation of the Iowa State University Alumni Association as it existed previous to this Amendment.

ARTICLE VI

1. A director, officer, employee, corporate member or other volunteer of the corporation is not liable on the corporation's debts or obligations and a director, officer, corporate member or other volunteer is not personally liable in that capacity, for a claim based upon an act or omission of the person performed in the discharge of the person's duties, except for a breach of the duty of loyalty to the corporation, for acts or omissions not in good faith or which involve intentional misconduct or knowing violation of the law, or for a transaction from which the person derives an improper personal benefit. If this limitation of liability is too broad, then the above provisions shall be enforced to the fullest extent as provided by law. If Iowa law is hereafter changed to permit further elimination or limitation of the liability of directors, officers, employees, corporate member or other volunteers for monetary damages to the corporation, then the liability of such director, officer, employee, corporate member or other volunteer of this corporation shall be eliminated or limited to the fullest extent then permitted. The directors, officers, employees, corporate member or other volunteers of this corporation have agreed to serve in their respective capacities in reliance upon the provisions of this Article.
2. This corporation shall indemnify directors, officers, employees, corporate member or other volunteers of this corporation, and each director, officer, corporate member or other volunteer of this corporation who is serving or who has served, at the request of this corporation, as a director, officer, partner, trustee, employee or agent of another corporation, partnership, joint venture, trust, other enterprise or employee benefit plan to the fullest extent possible against expenses, including attorneys' fees, judgments, penalties, fines, settlements and reasonable expenses, actually incurred by such director, officer, employee, corporate member or other volunteer relating to such person's conduct as a director, officer, employee, corporate member or other volunteer of this corporation or as a director, officer, partner, trustee, employee or agent of another corporation, partnership, joint venture, trust, other enterprise or employee benefit plan, except that the mandatory indemnification required by this sentence shall not apply (i) to a breach of such director's, officer's, employee's, corporate member's or other volunteer's duty of loyalty to the corporation, (ii) for acts or omissions not in good faith or which involve intentional misconduct or knowing violation of the law, (iii) for a transaction from which such director, officer, employee, corporate member or other volunteer derived an improper personal benefit or against judgments, penalties, fines and settlements arising from any proceeding by or in the right of the corporation, or against expenses in any such case where such director, officer, employee, corporate member or other volunteer shall be adjudged liable to the corporation.

ARTICLE VII

NO PRIVATE INUREMENT

No part of the net earnings of the corporation shall inure to the benefit of or be distributable to any private individual, but the corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in Article II hereof. It is intended that this corporation shall have and continue to have the status of a corporation which is exempt from federal income taxation under Section 501(c)(3) of the Internal Revenue Code of 1986 and which is other than a private foundation as defined in Section 509 of the Internal Revenue Code of 1986, and these Articles shall be construed accordingly and all powers and activities hereunder shall be limited accordingly.

ARTICLE VIII

INTERNAL REVENUE LAWS

Any reference in these Articles to a section of the Internal Revenue Code shall be interpreted to include reference to the corresponding provisions of any applicable future Internal Revenue law.

ARTICLE IX

DISSOLUTION

Upon the dissolution of the corporation, the board of directors shall, after paying or making provision for the payment of all of the liabilities of the corporation, distribute all assets of the corporation exclusively for the purposes of the corporation set forth in Article II hereof to Iowa State University to the extent that Iowa State University accepts such assets, provided, that, at the time of such distribution, Iowa State University is a qualified organization as hereinafter defined. To the extent that Iowa State University does not accept such assets, the remaining assets of the corporation shall be distributed exclusively for the purposes of the corporation set forth in Article II hereof in such manner or to such qualified organization or organizations as the board of directors shall determine. Any of the assets not so distributed shall be distributed by the District Court of the county in which the principal office of the corporation is then located, exclusively for the aforesaid purposes of the corporation or to such qualified organization or organizations as said Court shall determine. An organization is a "qualified organization" only if, at the time of receiving such assets, it is operated exclusively for the purposes described in Section 170(c)(2)(B) of the Internal Revenue Code of 1986, is or is treated as an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986 and agrees to apply and devote such assets for the aforesaid purposes of the corporation.

ARTICLE X

These restated articles of incorporation: (1) correctly set forth the provisions of the articles of incorporation of the corporation as heretofore amended; (2) have been duly adopted as required by law; and (3) supersede the original articles of incorporation of the corporation and all amendments thereto.

YOUR BOARD OF DIRECTORS

The ISU Alumni Association Board of Directors advises the alumni staff on policy making, planning and allocating resources to carry out the mission of the Alumni Association, and to support the mission of the university. Directors volunteer their own time and expenses to meet with the staff on campus several times a year. As members, you elect the 15 directors who represent you for five-year terms. A ballot is printed on the special cover surrounding this issue for you to vote for three new directors. The Board of Directors elects the association officers, who need not be members of the board. Ex-officio members represent constituent alumni, student and parent organizations. You are encouraged to contact any of the members listed below. If you would like to be nominated for the board next year, please contact the alumni staff.

RANDY J. HENDRICKS, *Industrial Administration 1980;*
Partner, Andersen Consulting of Arthur Andersen & Co.; Barrington, Ill.

O. ROBERT EDDY, *Chemical Engineering 1940;*
Chairman of the Board, Eddy-Walker Equipment Co.; Des Moines, Iowa

JAMES A. HOPSON, *Executive Director, Industrial Education 1969;*
Administrator of all Alumni Association programs; Ames, Iowa

HARVEY FREESE, *Meteorology 1970, M.S. 1973;*
Vice President and Co-owner, Freese-Notis Weather, Inc.; Des Moines, Iowa

DON C. BICE, *General Engineering 1949;*
President, Norstan Inc.; Wayzata, Minn.

BARBARA MEYER JOHNSON, *Home Economics Education 1949;*
Registered Representative, Century Companies of America; Cedar Falls, Iowa

ADRIENNE RICKERD HERBERT, *Home Economics Education 1951;*
Homemaker and Community Volunteer; Des Moines, Iowa

LINDA R. COTTINGTON, *Applied Art 1970;*
Partner, CARA Communications Ltd.; Des Moines, Iowa

SHARON DUNKER JUON, *Sociology 1969;*
Executive Director, Iowa Northland Region Council of Governments; Waterloo, Iowa

'90-'91

DANIEL L. KRIEGER, *Past President, Industrial Administration 1959;*
President, First National Bank; Ames, Iowa

AMY M. PETERS, *Social Work 1984;*
Coordinator of Alumni Relations, University of Nebraska Medical Center; Omaha, Neb.

JILL WAGNER-KING, *Vice President/President-Elect, Industrial Administration 1976;*
Manager of Software Marketing, IBM; Weston, Conn.

DALE W. LONGTIN, *Doctor of Veterinary Medicine 1958;*
General Partner, Muscatine Veterinary Hospital; Muscatine, Iowa

DANIEL C. ROBINSON, *Physical Education 1970, M.S. Higher Education Administration 1972, Ph.D. 1978;*
Professor, Professional Studies in Education, Iowa State University; Ankeny, Iowa

MARY "MEG" GRAF SPEER, *Secretary, Dietetics 1946;*
Registered Licensed Dietitian in County Health Care and Collaborator, ISU Department of Food and Nutrition; Ames, Iowa

WARREN R. MADDEN, *Treasurer, Industrial Engineering 1961;*
Vice President for Business and Finance, Iowa State University; Ames, Iowa

NORMAN D. SKADBURG, *Agricultural Education 1969, M.S. 1971;*
President and CEO, First State Bank; Webster City, Iowa

STEVEN F. MORES, *President, Science and Technical Journalism 1967;*
President and Co-Publisher, Tribune Newspapers; Harlan, Iowa

Ex-Officio Members

Gary L. Aitchison, Ph.D. 1972; College of Business Administration; Associate Professor and Director, Center for Professional and Executive Development; Ames, Iowa

Ruth Westley Buck, B.S. 1950, M.S. 1969; College of Family and Consumer Sciences; President, Family and Consumer Sciences Alumni Association; State Center, Iowa

Kathleen Halloran, College of Design; Assistant to the Dean for Alumni Affairs and Placement Officer; Johnston, Iowa

Stephenie Elliott Heuchelin, College of Engineering; Alumni Relations Coordinator; Ames, Iowa

William D. Hoefle, D.V.M. 1966, M.S. 1974; College of Veterinary Medicine; Professor of Veterinary Clinical Sciences and representative for ISU Veterinary Medicine Alumni Association; Ames, Iowa

Anne Collison Johnson, B.S. 1963; College of Liberal Arts and Sciences; Coordinator of Student and Alumni Relations; Des Moines, Iowa

Amy McDonald, B.A. 1991; Student Alumni Association senior student and President, SAA; Hopkinton, Iowa

Charles and Kathryn Reed, Iowa State Parents Association; Co-Presidents-Elect, ISPA Board of Directors; Dubuque, Iowa

David G. Topel, College of Agriculture; Dean of the College and representative for Agriculture Alumni Association, Ames, Iowa

California artist immersed in capturing life under the sea

After spending the first 10 years of his professional career "turning farmland into parking lots," Ben Saturen realized there was an ocean of opportunity awaiting his artistic talents. So he jumped in with both feet. Into the ocean, that is.

The 1972 landscape architecture graduate now calls himself a "freelance oceanic wildlife painter" (read: If it swims in saltwater, he's probably put it on canvas). Making the most of two or three diving weekends a year near his home in Brisbane, Calif., Saturen says after eight years he's finally making enough "to keep the busi-

JIM GENSHEIMER

Ben Saturen

A real ball-park figure

When the first ball flies out of the Chicago White Sox' new Comiskey Park this season, Randy Dvorak won't be watching the slugger parade around the bases. His eyes will be on the outfield seats, where a wide-eyed fan will snatch a souvenir and raise it high.

The 1979 ISU architecture graduate designed the stadium with just that celebration in mind. He never will earn a dime hitting a baseball, catching a football or dribbling a basketball; he's thrilled to be building venues for those who can — and those who watch.

TIM SEED

Randy Dvorak

The 33-year-old Dvorak is an architect with Hellmuth, Obata and Kassabaum (HOK) Sports Facilities Group in Kansas City, Mo. Miami's $80 million Joe Robbie Stadium — home to the National Football League's Dolphins since 1987 — was Dvorak's premier project. The $130 million Comiskey, which will house 43,000 fans when the Chisox play the Detroit Tigers on April 18, took up most of his next three years. Now he's concentrating on an arena in Chicago, where the Bulls' Michael Jordan soon will dunk 20,000 fans to the brink of hysteria.

"It's fun to work with a project that's enjoyed by so many people," Dvorak says. "I like being at home, watching the [Miami] Dolphins on *Monday Night Football* and saying, 'I did that.'"

Comiskey was particularly rewarding. It was built across the street from the now-razed, 80-year-old original Comiskey Park; Dvorak's charge was to "capture that old-time ball park atmosphere." He retained the character of the arched openings and the park's original terra cotta exterior, but says, "If you peel the skin off, you've got a new, function-oriented stadium."

Dvorak oversaw as many as 28 full-time HOK employees; including structural engineers, sound system engineers, acoustic engineers, landscapers and a raft of other specialists, he had regular contact with more than 100 workers. The numbers will be similar for his next Chicago assignment. Though he's in for another long, demanding grind, he hopes to take an occasional cab ride to Comiskey this summer, where he'll buy a hot dog, sit among happy fans and say, "I did that."

Nutritionist cooks up the future of America's culinary habits

Place in 13 x 9-inch baking dish. Bake 1 hour. 3 to 4 servings."

But why 13 x 9-inch? Why not 9 x 11? And why 1 hour? What's wrong with 55 minutes? And what if there are five for dinner?

If you're referring to one of more than 35,000 recipes from Kraft General Foods, Marilyn Schoentrup Kruse can cook up the answers pronto. Kruse is director of Kraft Creative Kitchens in Glenview, Ill. One of her many responsibilities is overseeing recipe development, which means every teaspoon has come under intense scrutiny.

But the owner of two ISU degrees (food and nutrition bachelor's, 1973, and industrial administration master's, '78) has many other pans on the fire. Her kitchen — and it really is a kitchen; one *big* kitchen — also develops new products like the recently introduced meat-filled DiGiorno Pastas. She is heavily into marketing the country's largest food company, from overseeing Macaroni & Cheese package photographs to brainstorming ad campaigns for Miracle Whip Light. And if an outside agency films a Kraft commercial, Kruse might be beside the camera, making sure the cheese is melted correctly or the salad dressing is poured just so.

ness alive; that is, keeping myself supplied with paints, canvases and frames."

He takes on occasional commercial assignments, but his real love is selling his works in San Francisco's Golden Gate Park, Washington Square or Union Square. "So many times, when artwork is in galleries, people don't get a chance to talk to the artist, and the artist gets no feedback," says Saturen. "I'm out there every weekend, and I love it."

Saturen says he first felt the ocean's beauty and power while lounging on a beach at the Red Sea. A local invited him to go diving, "and the water absolutely bedazzled me. I never forgot that intrigue." Several years later he acted on that intrigue. "After all that time," he says, no pun intended, "I finally got my feet wet in the ocean. Instead of taking nature and altering it, I stopped and saw what it had to offer."

He and his wife gained their scuba diving certification and began photographing under water. He'd then move those images from photos to paintings, becoming more fascinated by the ocean with each scene. While he's painted scores of underwater animals, he says he's developed a particular appreciation for the unusual. "Whales and dolphins will put food on the table," he says, "but it's sponge formations, coral, sea horses, anemones and other creatures that I find most interesting."

Saturen, who is listed in *Who's Who in American Art*, says he's one of just a handful of painters focusing solely on oceanic wildlife. His works have appeared in galleries and art shows around the country, including the Museum of Science in Boston and the Leigh Yawkey Woodson Museum in Wausau, Wis., a museum and gallery dedicated to wildlife art. "The world down there is full of unpainted material," Saturen says. "It's full of power and magic. I guess you could say that the ocean has swept me away."

Kruse should know food and consumers after a dozen years with Kraft. She's learned, for instance, that shoppers demand to know nutritional content and prep time. She knows restaurants are good spots to scope out when looking for the newest culinary trends. And she knows how every Kraft product will perform in every consumer application imaginable.

Marilyn Kruse (left)

"This job takes a left brain and a right brain," says Kruse. "There are so many business-oriented strategies, but you also have to apply creativity."

She's studied those trends for years. In addition to her academic and professional training, Kruse grew up the daughter of a trained home economist and granddaughter "of the best cook in the Midwest." As a child she loved to read recipes in magazines and "produce" her own food commercials. Those memories remain key ingredients to her work. "We have to produce food and ideas for the real world," she says. "We have all these professional home economists and this great equipment, but we're here for people like my grandmother."

Magazine is 'far out' alternative for designer

While a slumping economy has knocked a slew of once-promising magazines off the rack, another '90s trend — social consciousness — has been a godsend for one off-the-wall periodical.

Not to mention a career boon for an ISU graduate with a liberal dose of design talent to go along with her philosophical views.

The Utne Reader, dubbed by Time magazine "an alternative Reader's Digest," is a 6-year-old bimonthly filled with reprints from the political left and beyond. Using photos, illustrations and design, the Reader's art director, 1985 ISU distributive studies grad Kristi Hedberg Anderson, packages those sometimes-disparate essays into one coherent book.

SUE KYLLONEN

Kristi Anderson

So far, somebody's doing something right. The Utne (pronounced UTT-knee, as in founder and editor in chief Eric — it means "far out" in Norwegian) Reader is one of the country's fastest-growing magazines, more than tripling its circulation in the past three years. It now sells more than 225,000 copies, and has designs on bumping that figure to half a million by 1995. Ad pages have rocketed, too — 160 percent in three years — despite the magazine's ban on potential big-account ads like alcohol and tobacco.

Anderson has designed covers for such topics as education options, divorce and spirituality. While designer Anderson is thrilled that the magazine has struck a resonant chord, citizen Anderson is no less delighted. Coming of age during the "Me Decade" of the '80s, she says, didn't stop her from recognizing her own social bent. Now that she's one of about 20 progressive types at the Utne Reader, she's fast learning the depth of her convictions.

"What a great fit," she says. "'A magazine with a conscience,' that's what we call it. I studied journalism and design to be a magazine art director. But it's amazing to find a magazine that represents the same things I believe in."

More and more readers, it seems, are making the same discovery.

Bobby Randall felt he had something to prove in professional baseball. Now he recruits players with that same attitude.

JIM HEEMSTRA

Nice Pitch

Former major leaguer Bobby Randall throws baseball a curve

Not Robert. Not Bob. Not Rob. Bobby.

"It's friendly, approachable," Bobby Randall says. He takes it for a little test drive. *Bobby*. He lets it float across the room, in all its benevolence. *Bobby*. An adolescent's smile spreads across his perma-tan, 41-year-old face. Several strands of gray tossed like tinsel in his straight, jet-black hair are all that betray his varsity captain appearance.

Bobby. The grin stretches. "Pretty friendly, huh?"

Eminently friendly. If Bobby Randall is anything, it's friendly. The guy you'd like to see move in next door. The guy you'd like to see drive by when your car blows a gasket on the freeway.

But the guy you want on your major league baseball team? Or coaching a major-college program? Where's the tobacco? The carousing? The hard-playing, fast-living mentality?

A be-diapered Bobby Randall was waddling around Gove, Kansas, when Leo Durocher was swearing, drinking and gambling his way to baseball immortality. But The Lip could've had Bobby in mind when he groused, "Nice guys finish last." By the time Bobby graduated from Kansas State, did time in the minors and made the Minnesota Twins roster, baseball types had updated Durocher's epigram: "You don't win with Milkshake Drinkers."

Bobby is a card-carrying Milkshake Drinker. "No question — I didn't fit in with the major leagues," he says. "The spotlight, the glamour ... Gosh, I drove a Pinto wagon. But, dang it, I saw the Milkshake Drinkers play hard every day, play their hearts out."

There was no Bobby Randall Fan Club. Those were for the charismatic, run-producing hitters, stars like Rod Carew and Harmon Killebrew. But oh, could Bobby put a glove to work. His defensive mastery more than anything (lifetime homers: 1) kept him in the majors for four and a half summers. In 1976, after seven minor-league seasons, he made the Twins roster and won a starting job. That year he hit .267 and was half of the American League's top double-play combination.

After a knee injury in '77, he never returned to everyday status. The Twins released him in 1980 — on his birthday, no less — and he retired later that year. He finished his work on a K-State master's degree in '80, then took the ISU assistant job in '81. In '85 he became head coach.

Bobby loves the game, but rarely longs for the majors. "I loved it when they'd slide in hard and knock you down but you still made the [double] play," he says, through clenched, white teeth. It is a fond memory, nothing more. He rarely sees a Twins game, and never visits the clubhouse. "It's not me any more."

Was it ever? For Bobby, "me" is instilling values and baseball skills in young ballplayers and students. During games he is forever clapping. When he raises his voice, it's to holler support. "He doesn't believe in getting mad as a way to coach," says second baseman John Camelin. Fans fairly squirm when he argues an umpire's call; it's Andy Griffith cast as John Rambo. But Milkshake means neither spineless nor compromising. He makes his point, slaps the ump's back and lopes back to the dugout. Milkshake earns respect.

And success. Bobby's first ISU team went 22-38. The next five won 25, 25, 27, 36 and 33. Those 36 wins in 1989 set a school record, and led Iowa State to its first Big Eight Tournament appearance since 1975.

He isn't close friends with his players, but he is close. A father figure, one player calls

him. Assistant Lyle Smith's assessment: "Professional, not buddy-buddy." Bobby's excuse for arriving seven minutes late for a photo shoot was vintage Milkshake: He was talking a player out of quitting. Late on a biting cold December afternoon, a futile sun low in the purple southern sky rendered baseball a fleeting memory. Instead of driving from his State Gym office to Cap Timm Field, Bobby threw on his satiny, maroon Cyclone jacket and walked with the player. For three blocks he talked loyalty and commitment — to team and to self.

Crisis averted, he slapped another back, trotted onto the field and flashed his Topps grin. Smiling, like Milkshake Drinking, works for Bobby. It needn't work for his players. He doesn't expect them to swear off alcohol or even swearing. He doesn't insist on a Bible in every locker. "He tells us what he believes," Camelin says, "but there's no pressure for us to live that way. We're not like him in every way, but that doesn't matter."

What matters are four virtues: Loyalty, attitude, hard work and knowledge. "If [Chicago Cubs manager] Don Zimmer had the talks I've had, they'd have him committed," he says. "I'm paid to teach baseball, build character and graduate students. This isn't the major leagues."

This is college ball. This is gritting your teeth and sliding hard because it's the only way you know how. This is Bobby.

Former Cyclone star chases world record

Though he didn't set a world record, Danny Harris was anything but a disappointment to 2,000 Cyclone track fans in February.

The former ISU track star and 1984 Olympic silver medalist returned to Ames for a 600-meter race at Iowa State's Recreation-Athletic Facility. In his first race in Ames since returning to his native California in 1988, he won in 1 minute, 7.03 seconds, nearly a second under the recognized world indoor record. But to qualify as an official indoor record, the race must be run on a standard 200-meter track. On oversized tracks like

Danny Harris

ISU's, 300-meter oval, Harris' mark is second to Harold Reynolds' 1:06.87.

"I knew the world record was a possibility," said Harris, a three-time NCAA 400-meter hurdles champ and the world's top-ranked runner in the event last year. "But I was just happy to compete here. I was glad I was able to share with everybody.

Cyclones await NFL's beckon call this month

Four former ISU football players will be glued to the TV and the telephone on April 21-22, when the National Football League holds its annual draft. None are projected as top choices, but all four figure to have a chance to prove themselves as pros:

▲Despite running back Blaise Bryant's disappointing senior season (two injuries, 753 yards), NFL scouts have long memories — Bryant's 1,516 yards in 1989 still look pretty good. He was slowed by a hamstring pull last winter, which could have some teams shying away.

▲Offensive lineman Gene Williams had strong showings in senior all-star games, and hopes to parlay that performance into a chance to follow ex-Cyclone Keith Sims into the NFL. Sims was a starting lineman for the Miami Dolphins as a rookie in '90.

▲Two years ago, the Cleveland Indians drafted cornerback Marcus Robertson. Now NFL teams get a shot at him. Robertson is projected as a late-round choice.

▲Kicker Jeff Shudak is another late-round prospect. After four solid seasons, proven leg strength and consistency make Shudak perhaps this ISU class' best bet to stick in the league.

SPORTS BRIEFS

WINDS OF CHANGE NCAA Executive Director Richard Schultz told an ISU crowd in February that change has only begun in intercollegiate athletics. "If I were a coach," he said during an Institute on National Affairs lecture, "I'd be concerned." While many Division I coaches have expressed disdain for the NCAA's recent efforts to decrease the time and money devoted to athletics, Schultz said the next target — academics — likely will elicit even more intense reactions.

WELCOME ABOARD Football coach Jim Walden signed 15 players to national letters of intent in February. Walden's future Cyclones include 6-foot-4, 220-pound B.J. Spyksma, a first-team all-state linebacker from Dallas Center-Grimes High School; 340-pound offensive lineman Lance Keller, an all-American at Ellsworth (Calif.) Junior College; Blaise (that's right, Blaise) Roberts, a 5-foot-11, 185-pound running back from Fort Worth, Texas, who rushed for 1,680 yards as a sophomore but missed parts of his junior and senior seasons because of injuries, and quarterback/defensive back Matt Straight, who led Logan-Magnolia to Iowa's Class A state title last fall.

SPIKERS, TOO Volleyball coach Vicki Mealer has signed two Minnesotans to national letters of intent: Kirsten Hugdahl, a 6-foot middle blocker from Bricelyn, and Dawn Hatle, a 5-foot-10 outside hitter from New Ulm.

MAT HONOR Former Iowa State wrestler Richard Barker will be inducted posthumously into the National Wrestling Hall of Fame next month. Barker, who competed for Iowa State in 1920 and '21, later started the wrestling program at Cornell College in Mount Vernon before coaching at the University of Michigan.

SKY HIGH ISU Skydiving Club members Dan Langstraat and Karl Eckrich earned third-place honors in the 1990 Collegiate National Skydiving Championship last January in Marana, Ariz. They joined divers from Georgia Tech and Wright State in forming an entry in the relative work event, in which divers jump from 9,500 feet and make as many formations as possible in a 35-second freefall.

BY CHARLES GRATTO

Calculating the Cost of War

A good way to think about where the U.S. economy might go in 1991 is to take a look at where it has been. A year ago, had there been such a thing as a traffic signal to sum up all the economic indications, it would have been a green light. The message was that economic growth was slowing down, but 1990 would be a part of the generally favorable period that prevailed in 1987, 1988 and 1989.

Then, in August, Iraq invaded Kuwait. That caused sharp and unpredictable increases in the price of petroleum, tilting the economy toward a recession. The signal light shifted from green to flashing yellow. The message: Down the road, there were conditions that required caution. The flashing yellow light told producers, consumers and managers of a possibility of higher levels of economic risk and slower economic growth.

ILLUSTRATION BY DANIEL WALLACE

It was the oil price shock that dominated the other economic effects of the Gulf War. Oil prices rose far faster than incomes. Consumption of other goods and services had to fall. The economic impact of the Gulf War, in its early stages, was more like the impact of the petroleum price shocks of 1973 and 1979 than like the impact of World War II or the conflicts in Korea and Vietnam.

Earlier wars required that large numbers of employed civilians join the military forces and be absent from civilian life for long periods of time. This led to a reduction in the supply of civilian labor and upward pressure on wages. The first U.S. forces in the war in the Gulf were regular forces. They were shifted from one duty to another. The call-up of the reserve forces created inconveniences, and in some cases hardship, but did not cause a labor shortage.

Earlier wars and conflicts required that large amounts of equipment and supplies be manufactured and distributed to U.S. forces and to our allies. The war in the Gulf was different because it relied on equipment and supplies that were in inventory. It did not create new manufacturing jobs and use up excess manufacturing capacity as did previous conflicts.

Earlier conflicts were often financed by government borrowing. The deficit financing stimulated the economy. The war in the Gulf came at a time when federal deficits were already large and all levels of government were preoccupied with ways to control government spending. While the cash costs of the Gulf War will be paid with borrowed money, the positive economic effects of the spending will be small.

The economic signal changed from flashing yellow to flashing red when combat began in January. While the start of the shading phase of the war caused concern, it clarified the petroleum situation. Once it appeared that the fighting would not destroy petroleum production capacity outside of Iraq and Kuwait, oil prices fell. The economic outlook improved a bit. It was thought that recession might not be as serious as feared and that the economy might be growing again by late June.

That would mean that 1991 would be a year of zero growth. Unemployment would increase. If the price of petroleum stays around $20 a barrel, that, combined with zero economic growth, should mean that inflation will not be a big problem in 1991. Slow growth, low inflation and a Federal Reserve Board Policy aimed at encouraging economic recovery all point to steady or falling interest rates this year.

Overall, zero growth and rising unemployment will make the economic climate less friendly to consumers, producers and managers than it was in 1991. The lower interest rates and relief from inflation are welcome but are not enough to offset the negative factors.

Charles Gratto is a professor of economics at Iowa State.

Thanks

Bob and Diane Greenlee are a great team—on and off the air. As undergraduates in the mid '60s, Bob managed KISU, the campus radio station now known as KUSR, and Diane was one of KISU's first two women broadcasters. The duo earned telecommunicative arts degrees, spent the early years learning the ropes and have gone on to make a definitive mark in the world of radio broadcasting.

Now, more than 25 years after graduation, Bob and Diane's love of journalism returns to Iowa State—this time as a gift through the Partnership for Prominence campaign. Bob and Diane's $250,000 commitment to the Department of Journalism will benefit students who share their enthusiasm for the art of mass communication. And, Bob and Diane have given unrestricted funds within the department, which allows administrators and faculty the freedom to designate and fulfill current and future needs of the journalism program. Bob and Diane, thank you. You've given a gift that strengthens the future.

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For information about the Partnership for Prominence campaign, call the ISU Foundation at 515/294-4607.

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INSTRUCTIONS FOR VOTING FOR BOARD OF DIRECTORS

1. Each association member may cast three votes and may select up to three write-in candidates in lieu of listed nominees.

2. Original ballot must be signed by each voter and mailing label must be attached to be valid.

3. Detach the completed ballot, fold and tape it in place, affix a first-class stamp and mail it to the Iowa State University Alumni Association.

4. Ballot must be received not later than 5 p.m. May 24, 1991.

BALLOT

Proxy Statement
As a qualified voting member of the Iowa State University Alumni Association, I hereby authorize Alumni Association President Steve Mores to cast my vote as indicated below.

Voter A signature _____

Voter B Signature _____
(Two signatures are required if both spouses vote.)

Check three candidates

Voter A	*Candidates*	*Voter B*
A1._____	Don Brauer	_____B1.
A2._____	Kevin Brooks	_____B2.
A3._____	Roger Feldman	_____B3.
A4._____	Don Jordahl	_____B4.
A5._____	Anne Robinson	_____B5.
A6._____	Roberta Simpson-Dolbeare	_____B6.

For write-in votes *only*:

A7. _____	B7. _____
A8. _____	A8. _____
A9. _____	B9. _____

For office use only
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