

# NDSU NORTH DAKOTA STATE UNIVERSITY FALL 2006 magazine







# contents

<b>Editor's note</b>	5
<b>On the cover</b>	6
<b>Letters</b>	7
<b>Contributors</b>	7
<b>It's a big world</b> Essay by David Wittrock	8-15
<b>What goes around</b> Jimmy Billups appreciated	16-17
<b>Monarchs at Mirror Pool</b> A butterfly hunt	18-21
<b>A quick 26.2</b> Fargo Marathon surprise winner	22-23
<b>Soup</b> Thinking about food	24-31
<b>A good man in Africa</b> He wants to make a difference	32-39
<b>Excerpts</b> Craig Bohl	40-41
<b>Feathered Casanovas</b> Research on dark-eyed juncos	42-45
<b>Her trees march</b> Essay by Sally Ann Flecker	46-47

# NDSU Volume 7 Number 1 FALL 2006 magazine

**Editor**

Laura McDaniel

**Editorial staff**

Char Goodyear

Dan Koeck

Kathy Laid

Carol Renner

Tammy Swift

**Art direction/design**

Julie Babler

**Address changes**

Send address and name

changes to:

*office@ndsualumni.com*

**Letters**

Unless noted “not for publication,” communications to the editor are considered for publication, often in a condensed version.

**E-mail:** *laura.mcdaniel@ndsu.edu*

PO Box 5167

Fargo, ND 58105

**Fax:** 701.231.1989

Volume 7, number 1

NDSU magazine is published twice a year, in spring and fall, by North Dakota State University, University Relations, PO Box 5167, Fargo ND 58105.  
*NDSU is an equal opportunity institution.*

**President**

Joseph A. Chapman

*joseph.chapman@ndsu.edu*

**Provost and Vice President for Academic Affairs**

R. Craig Schnell

*craig.schnell@ndsu.edu*

**Vice President for Agriculture and University Extension**

D.C. Coston

*d.c.coston@ndsu.edu*

**Vice President for Business and Finance**

John Adams

*john.adams@ndsu.edu*

**Vice President for Research, Creative Activities  
and Technology Transfer**

Philip Boudjouk

*philip.boudjouk@ndsu.edu*

**Vice President for Student Affairs**

Prakash C. Mathew

*prakash.mathew@ndsu.edu*

**Vice President for University Relations**

Keith D. Bjerke

*keith.bjerke@ndsu.edu*



## editor's note

When he was a very little boy, he had a round sweet face and huge blue eyes and was shy around an aunt he didn't see very often, could snap his head in the direction she wasn't and hold that pose like a statue until she went away and he could go back to his toys. He had odd eating preferences, like you'd have to tear up a piece of American cheese into squares and arrange them around the edge of a plate and put a bun in the middle and that's all he would eat. Rarely, he would misbehave just a little at the dinner table, would want to stand on his stool or something, and when that did occur, his dad would have to muster up some sternness and order him firmly to sit down. This was not a natural voice for the dad, but it had to be done.

A few years later, when his little sister was helping absorb some of the attention, the boy became a bit more animated, and like his dad was fascinated with cars. On Saturday nights when his mom had to work, he would call Grandma to say "We're tomin' over," and when they arrived his dad would fall asleep in an easy chair so he'd grab some other people to play car on the little sofa in the spare room. Every couple of minutes that old sofa would blow a tire, so we'd stop the couch and he would jump off to change the tire. Once, when he asked Grandma to help him, she said girls don't do that sort of work, which made the aunt crazy, so she got down on the carpet and cranked on the jack and loosened bolts. (The little sister, by the way, also beautiful. She looked just like Cindy Lou Who, the sweet little girl with the blonde ponytail who didn't mistrust the Grinch as he was stealing the family Christmas tree.)

Soon the boy became interested in computers, and was very smart at learning the games and keyboard shortcuts and so on. One time his sister was playing a game and needed a prompt about which key would do such and such. He was doing a puzzle with Grandpa but could answer quickly — F8 — without even looking up. Grandpa is wild about that story.

Suddenly, it came time for this young man, no longer the least bit round in the face nor at all shy, to register for his first semester of classes at the fine university in Fargo, North Dakota, and while his mom and dad tried not to think about him moving away, the rest of us tried to figure out how this little boy had grown up when the rest of us aged only a year or two.

Thank you for reading.

**[laura.mcdaniel@ndsu.edu](mailto:laura.mcdaniel@ndsu.edu)**

## on the cover



**Bruce Sundeen** is, by day, a video production specialist at North Dakota State University, a position he's held for just more than nine years. He has experience as a television news reporter and photographer, and is working on his master's degree in communication at NDSU. His resume is impressive, evidence of a collegial, hard working good guy. Those qualities show up in his photographs, especially the shots from his travels to India in this issue. His ability to establish rapport with people is not impeded by language barriers, and he has a good eye. He did learn a bit of the local dialect in India, and for that effort, got a rare shot of a little girl who heard him call to her in her familiar language, but was visibly stunned to have turned to see someone so unfamiliar. He drew crowds wherever he traveled, and most times the groups wanted their picture taken with the photographer.

# letters

This was not only a very good issue, but entertaining. Topics crossed many areas of life and educated this old graduate.

Charles H. Johnson

I found it interesting that NDSU/Fargo, a more midwestern and somewhat isolated place, would tackle a larger issue such as racism. Kudos! I myself am Korean, although I am adopted and generally speaking, feel pretty white. I don't believe I have experienced racism to a degree that I have been prejudiced against. One must say that if you are going to be a minority, being Asian is one that has more favorable connotations associated with it.

Well, all this to say that it is nice to know that the topic is being tackled and open for discussion. I believe that having a greater understanding of other cultures can explain why and how people form opinions, decisions and reactions that they have within our own society and globally. Walking a mile in someone else's shoes can give a fresh perspective!

Kelli (Wilmot) Block

# contributors



**Sally Ann Flecker** (*Her Trees March*, pp. 46-47) describes herself as an essayist and nonfiction writer interested in the incongruities and small moments of life, but she's also a musician who recently took a week's worth of classes in whistling. Now, in addition to writing thoughtfully about her first trip to Fargo, she is adept at whistling harmony

to tunes like *Amazing Grace* and the theme from Masterpiece Theater. Professionally, she is a freelance magazine writer and writing coach who works full time from a home office with her dog at her feet and an office window that opens.



**Laurie Baker** (*Soup*, pp. 24-31) is a teacher of Women's Studies, Kundalini Yoga, and assorted other subjects. She is a graduate of Minot State University and North Dakota State University with a master's degree in speech communication. She also is state coordinator for National History Day in North Dakota and the author

of several plays about historic women and the editor of *Plum Valley Women: Minot's First 100 Years*. She volunteers with Hospice of the Red River Valley for the Pathways Program. In her spare time she likes to read, write, walk and sing.



**David Wittrock** (*It's a big world*, pp. 8-15) came to NDSU in 1989 to join the faculty in psychology, and became dean of the graduate school in 2003. He was a popular teacher, as evidenced by a number of student-

nominated awards. He also did his share of institutional service on committees to do with topics such as computer use, diversity and teaching. He's a member of the American Headache Society, and the American Psychosomatic Society.



Photos by Bruce Sundeen

## IT'S A BIG WORLD AFTER ALL

Any year you visit the Taj Mahal, the Great Wall, and the Acropolis constitutes a very good year, and I have had a fortunate year. I do not say this to be boastful. In fact I say it with a sense of disbelief. I am a neophyte world traveler, many on our campus have traveled much more widely, and I had the good fortune to be accompanied by some of them on these trips. Given that the graduate student population at North Dakota State University is more than 25 percent international students, the vast majority from India and China, these trips are probably long overdue. While NDSU is still a wonderful educational institution for people who grow up in North Dakota and western Minnesota (50 percent of our graduate students still come from these states), NDSU has become an international institution. As we look at the world in which our students will live, it is clear India and China will continue to be increasingly greater participants. The impact of these countries on our economy, and the world's economy, is already quite apparent. In the lives of our children, these countries will be major rivals, or maybe, hopefully, partners.

I grew up in a town in central Wisconsin, 100 miles north of Madison, fifteen miles from Stevens Point, home of the University of Wisconsin-Stevens Point and Point Special beer (which, prior to the rise of micro-breweries, was one of only four small breweries that survived in the heavily Germanic, beer and cheese-crazed state of Wisconsin). Wisconsin Rapids is dominated by a paper mill, which provided the economic base for the area. The mill employed my grandfather, my father, my uncles, and most of the rest of my extended family, including me, for about six months, after the premature end to my first attempt at higher education. The mill is now owned by a Finnish company, my father and uncles are long since retired. Most of my other extended relations no longer work there either, as downsizing and efficiency have changed the paper industry and the communities where the mills are located.

I am certain most of the people of Wisconsin Rapids did not see it coming, the end to the locally-owned mill, the entry into the world economy, the changing of how people made their living. I think I was fairly typical of my peers in my exposure to the world. The only trips I remember before my teen years were visits to my grandparents farm in Eitzen, Minnesota (I dare you to find it in your atlas). A tiny place on







the Iowa border, my grandparents farmed 100 acres of rich land, paying for part of the farm during the Depression years. My grandmother told stories of hearing wolves on the sleigh ride to church one Christmas Eve when she was young. My mother tells a story of taking the same sleigh to church another Christmas Eve when the snow was falling so heavily they wouldn't take the car (only to find the service canceled). My brother, cousins, and I have fond memories of our visits to the farm, stories I was able to rehash recently with my cousin in the Netherlands, where he runs the Amsterdam office of a multinational technology company.

The first real trips we took were to the typical Midwest tourist meccas. The Black Hills via the Corn Palace, Wall Drug, and the South Dakota Badlands (I apologize, we too missed North Dakota. I didn't get to North Dakota until I interviewed at NDSU) and Mackinac Island and the northern peninsula of Michigan.

I don't say this to belittle central Wisconsin, or any other place in small town Midwestern America. There were many good things about the place I grew up. I think I was particularly fortunate to grow up in a family that valued education. My parents, and grandparents, made it clear to my brothers and I that we WOULD do well in school, but they were very encouraging of our success. We also had access to good schools, both parochial (grade school) and public (high school). This environment certainly stimulated an active interest of the world. I started collecting stamps when I was about 7 years old, in part because I thought it was pretty cool to have something from exotic places like Mauritius, Morocco, and Zambia.

My travels began to increase, slowly. My first real adventure occurred between my previously mentioned unsuccessful initial attempt at higher education and my stint in the paper mill. After quitting school, I packed up my 1966 Buick Le Sabre (a car you could pretty much live in) and set off for Florida via Maine. It is humorous



now to think what a big adventure this was at the time. Midwestern boy makes first step into the big world alone. I would camp (or sleep in the backseat, I told you it was a big car) for a couple of nights and find a place to take a shower every few days. Indianapolis, Columbus, Cleveland, Boston. Getting completely lost on the streets of Philadelphia — an experience I can still picture vividly. Hiking in upstate New York, Maine, and North Carolina. Two months of meandering that led me to Orlando where I met an interesting cast of wayward youths sort of like me, a group that, after about a month, I figured I probably should put behind me. I occasionally wonder where my erstwhile companions ended up.

A few months in the paper mill restored my enthusiasm for education. My education resumed at the University of Wisconsin – Madison, a place that has had a great influence on my views of what an institution of higher education should be. While Madison is not a huge city, the UW had a student population twice the size of my hometown. It is an amazingly diverse community, with students from all 50 states and most of the countries of the world. It is the first time I was really challenged as a student. I wish I could say I fully took advantage of the opportunities the UW offered. I wish I could say I immersed myself in the cultural activities available, that I met individuals from all 50 states and dozens of countries. I really wish I could say that I had the determination and self discipline to take up the offer from the coach of the rowing team to try out for the rowing team. Like many students, I was more immersed in the social aspects of the college experience. What I did get was a quality education, enough exposure to the research taking place on the campus to decide that I would like to have a career in science. I believe it was also my experiences in Madison that stoked my interest in working at a public, land-grant institution like NDSU. While I was too naïve to fully appreciate it at the time, the UW is still infused with the spirit of the Wisconsin idea that the boundaries of the university should be the boundaries of the state and beyond, an idea that I more fully comprehend and believe now.

I went to graduate school at the State University of New York at Albany, where I was forced to stretch personally and intellectually. It is the first time I lived outside the Midwest. This will be shocking: there are differences between the Midwest and the Northeast. I became a bad driver in Albany. When I moved back, it took me at least five years to stop blasting the horn as soon as the light changed, longer to stop using the single finger salute.

As a clinical psychologist, I was required to complete a clinical internship. This final stage of my formal education occurred at the VA Hospital and the University of Mississippi Medical Center. Jackson is a fascinating city with the biggest overt contrast between rich and poor I have seen in the United States. My impression of Jackson is of a city

with more ultra-luxury cars (Rolls Royces, high end Mercedes, Jaguars) per capita than I have seen even in places like New York and Boston. The patient parking lot at the VA hospital had a different look to it. I lived in Jackson at the time the film *Mississippi Burning* was released, which spurred a very public, soul-searching discussion of whether things had changed in the intervening years. Jackson forced me to think about issues of race and economic class in ways that I was not asked to think about them in Wisconsin Rapids or even in Albany. It was a very positive, and at times troubling, experience for me. Mississippi was my most prominent exposure to cultural, ethnic and racial, and class diversity. It was a great experience for me, and I still crave a big old plate of red beans and rice.

I was unprepared for Delhi. I traveled to India with a group from NDSU to attend a conference on higher education at the Ansal Institute of Technology, known as AIT. NDSU has established a working relationship with AIT that brings students from India to NDSU, and provides an opportunity for NDSU students to study in India. I have many images and perceptions from my first visit to India. Some of my visions of driving I would rather not remember, including the donkey I saw from a couple of feet away as we careened to a stop in an effort to avoiding running over, the woman's scarf that wrapped around our rearview mirror as she dodged traffic in Delhi, and the rearview mirror that popped off, the victim of a bicyclist that cut too close in Pune (the bicyclist just kept riding on his morning commute).

Driving in India is a wonderful (and scary) mix of pedestrians, horse, camel, and bullock carts, bicycles, auto-taxis, cars, trucks, and assorted vehicles of all sizes and vintages. All of these are traveling on the same roadway and it is immediately apparent that things like lanes and traffic signals are merely suggestions. It is a hyper competitive experience; the main



Photos by Bruce Sundeen



focus seems to be advancing forward as fast as possible. (Remarkably, we saw very few accidents, and there are rules that you begin to discern with experience. There is also a high degree of professionalism among the many people who make their living as drivers.) The highway to Agra, site of the Taj Mahal, is a great example. A modern highway, except for where it narrows to pass through communities, a bit like Highway 10 still does on the way to Brainerd. You pass modern trucks, painted in unique and colorful designs, an ox cart that has been hit, killing the oxen and probably leading to financial destruction for the owner, camel carts bringing the crops in from the fields (which are being burned to prepare for the next planting). The second camel is able to reach forward to grab a snack from the cart ahead.

But perhaps my most vivid image from India is the magnitude of construction and development. Gurgaon, site of AIT, is a large construction zone. Dozens of huge, new apartment complexes are visible. Multistory buildings being constructed, without cranes, with massive efforts of physical labor and amazing bamboo scaffolds. In Pune, we visited the new John Deere Technology Center in a bright shiny modern new technology park. Beautiful buildings with the bright blue sky reflecting off the glass facades. Right across the street from the office of John Paulson, a former North Dakotan, is the brick making plant for the new construction that is still occurring at a mind-boggling rate. The brick making plant is a shed, the bricks are handmade and standing in piles waiting for a cart to take them to today's building site. All around land is being prepared for new buildings, the goat herders are moving their charges through while they still can.

India is a fabulous cacophony of traffic and construction. A few days in the country gives you a sense of extremes, in how people move on the roads, in where they live and shop. There is a sense of growth, a current of excitement and possibility, surrounded by abject poverty. The rapid rise of India in the world economy has led to hand-wringing over the loss of jobs in the United States, the rise of outsourcing as a dirty word. All of this has been well documented in the popular press and the hugely popular book *The World is Flat*, written by Thomas Friedman.

I was better prepared for my trip to China. I did a better job of starting early to prepare for the trip, and, surprisingly, Beijing felt, in many ways, much more like an American or European city than the places I visited in India. We were in Beijing to sign an agreement between NDSU's plant sciences program and the Beijing Forestry University to work cooperatively in the area of turf grass management. Wenhao Dai, a faculty member in plant sciences, completed his graduate education in Beijing and still has connections with the Forestry University. He also worked at and has connections at the Summer Palace, which used to be well outside of Beijing but is now part of the larger metropolitan area. He had been

involved in developing grass that would survive in the lushly wooded grounds of the Summer Palace, and his connections allowed us to get a guided tour of the extensive, and very beautiful, grounds. It is perhaps a little ironic that turf grass management is the focus of our initial collaboration. I have been told that although China has 20 percent of the world's population, it has only 5 percent of the arable land. So a program that focuses on golf courses, parks, and other recreational activities may not be the one that seems most pressing, especially when China is faced with expanding desertification as the Gobi expands. However, it appears our collaboration may have the opportunity of expanding into the areas of range sciences and natural resources management in the future.

Beijing is preparing for the 2008 Olympics. This means the production of modern highways and the removal of vast tracts of old housing. People who have been to Beijing multiple times over the past decade commented on the rapid growth, the decline of the use of bicycles, and the explosion of automobile traffic and modern buildings. The visit to the markets was less pressured, although we were quite impressed with the young entrepreneur who pushed her merchandise in our path to slow us down.

I thought I was prepared for the poor air quality in Beijing. Like many cities with air pollution problems, the prevailing winds in Beijing are blocked by a range of mountains. This, along with the rapid expansion of motorized transportation and the general expansion of industry, has made Beijing notorious for air pollution. In addition, the expanding desertification of western and northern China has led to increasing dust storms in the capital. Twice in the weeks preceding my visit the dangerous respiratory combination of severe pollution and huge dust storms in Beijing had made the news. Buildings would become hazy shadows when they were more than a few hundred yards away. As we were driving to the Great Wall,

I was surprised to find that we were about to drive into the mountains, having had no warning that we were even approaching mountains until we were within a couple of miles of the range because they were hidden in the smog.

I took a week of vacation after visiting Beijing, the first real vacation I took since I became dean three years ago. My vacation took me to Athens where I was able to stay with some friends fortunate enough to have a home in the suburbs of Athens. I had been to Europe before, but my recent visits to India and China allowed me to make some comparisons I had not had the opportunity to make previously. I do not speak any other languages fluently, at least not anymore. (I once spoke German fairly proficiently, but nearly 30 years of neglect has left me unable to use it in any sort of functional way.) European cities, even if you don't speak the local language, are very comfortable. An ocean and a couple of hundred years of semi-separation have not changed our cultures all that much. The foods, the social norms, the customs, while different in certain ways, are not completely foreign. I have never felt lost or overwhelmed wandering around European cities. In contrast, without people to help me get around, I might have been tempted to turn around and leave Delhi without even departing from the airport.

Athens is an excellent place to think about your place as an American in the 21st century. Athens reeks of history. (I saw two small children walking around museums pointing at exhibits and saying repeatedly "ruined, ruined, ruined.") On my final afternoon in Athens I sat in a sidewalk cafe. Grapes grew on the trellis above me. In spite of the warnings about smog, the air in Athens seemed wonderfully clean after Beijing. Athens allows you to effortlessly immerse yourself in several thousand years of history. Western history. The history and philosophy to which we attribute our ways of thought, our science, and our government. From my table, I was able to look up the hill through the cafes and shops to see perhaps the greatest icon of Western civilization, the Acropolis.

My experiences in Asia compelled me to think about America's future. To say that Europe has become insignificant on the world stage would be an overstatement. The United States is not about to disengage from Europe, although there is increasing talk about whether NATO remains meaningful and it is clear that our policy in Iraq has strained relations with some of our long-standing allies. But it is impossible to ignore the rising significance of Asia. Already, much of our involvement in world affairs is focused on Asia. Iraq, Israel and the Palestinians, nuclear weapons in Iran and North Korea. Where is Osama bin Laden?

Current projections are that the world will have 8 billion people by 2050. Nearly half of these people will live in two countries, China and India, and we are already concerned about the impact of these countries

on our economy. One does not need to be a prophet to see the impact that Asia will have upon our children and grandchildren.

The psychologist Jerome Kagen has said that "All individuals live in a small space fenced by their historical moment and the associated beliefs of their community." I am a reasonably well educated individual, but my recent experiences traveling to Asia have been humbling. I purchased a travel guide for my trip to India and in reading the first chapter on history I quickly realized I knew next to nothing. I knew the Taj Mahal existed. I knew that Britain dominated the Indian sub-continent for an extended period of time. My experiences during my life, my formal education, the places I have lived and visited, had fenced me into a view of a European American world. My background, coming from a town in Wisconsin, is comparable to that of many of the students at NDSU. My job as an educator is to help these students see over the fence. We can do this by providing class experiences that give our students a wider world view, this may require a rethinking of the core courses to help them better understand Asian culture and history. We can do this by providing more opportunities for students to interact with individuals from different cultures. We have a growing international presence on our campus; we need to look at ways to foster interactions between this international community and our American students. We need to look for more opportunities for our students to have educational experiences abroad in Asia. I believe that it is critically important that we focus on these issues. The Wisconsin idea was that the borders of the university were the borders of the state and beyond. Today, technology has made beyond the whole world. This broadens the scope of those we consider our students, but it also requires that we prepare our students to thrive in that flatter world.





Photo by Dan Koeck

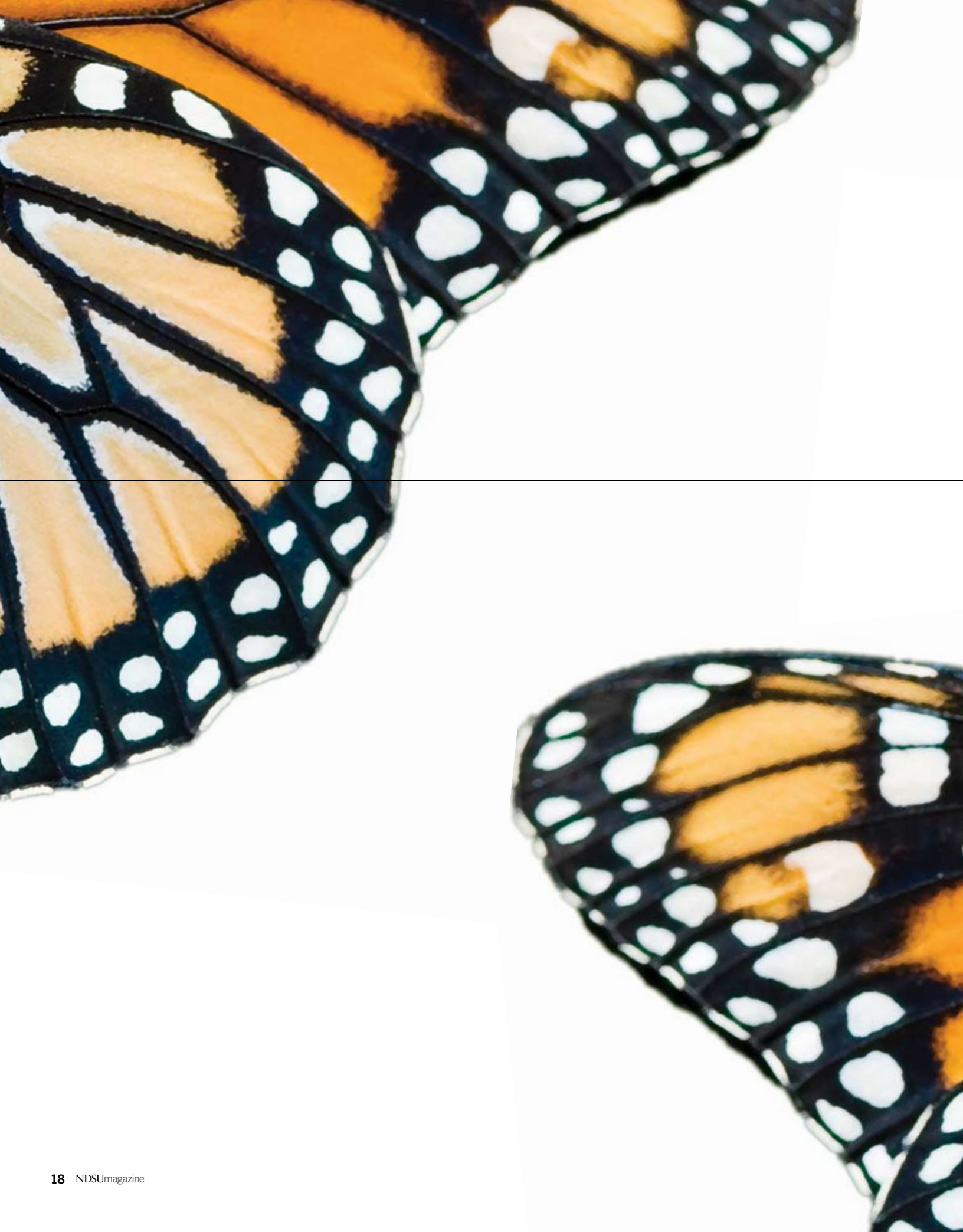




## WHAT GOES AROUND

---

Mary McCannel Gunkelman graduated from North Dakota State University in 1942. In the ensuing years, she came to firmly believe that a student would be more likely to reach his or her full potential in a happy environment. Her family honored this belief after her death by establishing an award in her name in 1987. Each spring, the entire campus is asked to nominate someone who makes the campus a happy place, and this past spring Jimmy Billups got the prize. Billups is a studio technician in the architecture and landscape architecture studio. He told someone after the ceremony it was the first time he knew anyone cared what he did. The students appreciate his brand of craftsmanship and dedication to their needs in the woodshop. He made an impression last year when he helped 70 second-year architecture students who'd never used a woodshop before build beautiful wooden model stands. He came early, stayed late, showed students his kindness.






---

# MONARCHS at MIRROR POOL

*Our hunt begins at Mirror Pool, which is in the northeast corner of the Sheyenne National Grasslands. Although only a short hour's drive west and south of Fargo, it is a landscape unlike anything in the Red River valley. The cloudless mid-August day is rapidly warming, turning this native, eastern deciduous forest humid.*





In the stillness of the pond, the reflected sky and trees explain the name “Mirror,” one of a series of snaking, riverine oxbow pools, which are formed in old channels when a river changes course. A wooden sign to the east announces that this is the *H. R. Morgan Nature Preserve and Interpretive Trail, in honor of a conservationist, a leader, and a sportsman, ND Game and Fish Commissioner 1948-1957.*

Another smaller, bullet-ridden one commands, “*No motor vehicles beyond this point — ND G&F.*”

Not knowing where to start, we follow the trail into a stately stand of basswood and elm trees, our progress punctuated by alternating patches of shade and sunlight, coolness then heat when the mid-day sun manages to break through the natural arbor. The wild plums growing along the path are not quite ripe, the skin a yellowish red and the flesh inside still a little too firm and tart. At every step it seems that a leopard frog jumps ahead or off the trail. So far in our quest, we have seen hawks, deer, ducklings, turtles, a stunning yellow-headed finch, and two blue herons. Dragonflies, grasshoppers, and numerous cabbage butterflies buzz, jump, and flutter around us. Besides the basswood and elm there are the oaks of the sandhills and stands of alder and aspen within this mature forest.

Along the banks of the Sheyenne, which the trail follows, are native species of fern, the highest concentration of this plant in the state. In all, five rare state animals and seventeen rare plants have been recorded in or near H. R. Morgan Preserve and Mirror Pool. One of the five rare animals is the Northern Prairie Skink, a type of smooth-skinned lizard, and the other four are species of butterfly: the Dakota Skipper, the Mulberry Wing, the Broad-winged Skipper, and the Dion Skipper.

But, it is too late in the season for a glimpse of any of these except perhaps the Dion Skipper, which flies in July and occasionally into August, according to *Butterflies of North Dakota*, the seminal text for lepidopterists in the state. No, our pursuit is for something just a bit more mundane — a Black or Eastern Tiger Swallowtail.

Even this will be a stretch, advises Gerald Fauske of the North Dakota State University entomology department. A swallowtail butterfly this late in the summer would be part of a second generation, a production dependent upon the conditions, and this has been an abysmal field season, Fauske reports. The numbers and variety of species of butterflies are



IN ALL, FIVE  
RARE STATE  
ANIMALS AND  
SEVENTEEN RARE  
PLANTS HAVE  
BEEN RECORDED  
IN OR NEAR  
H. R. MORGAN  
PRESERVE AND  
MIRROR POOL.



down, most likely for a variety of reasons. The dry spring and drought conditions throughout much of the state have contributed to a severe lack of flowering plants, the food that butterflies need. And though drought is most likely the biggest factor, insecticide use and climate change may play a role also.

In an attempt to improve butterfly habitat, Fauske recently contributed to an NDSU Extension Service publication “Butterfly Gardening in North Dakota,” which details ways in which communities and backyard gardeners can maintain nectar sources for butterflies and host food plants for caterpillars. The idea is to grow a variety of annuals and perennials that will bloom throughout the season. For example, in his own yard Fauske has zinnias and petunias along with yellow and white cosmos, potentilla, and a flowering pear and dogwood tree. Even so, this year he’s viewed only common Cabbage butterflies in his garden.

“The Cabbage is a European import. It is kind of like the house sparrow for bird watchers,” he says. “I haven’t had a year like this ... it’s unusual. I haven’t even had a Monarch [in the backyard], though I have seen them while out biking.”

An avid cyclist, Fauske broke his arm on the third of June in a collision with a rollerblader, an accident that sidelined him for most of the summer. “I wasn’t in the field as I should have been. It kept me in the lab, and it’s only in the last few weeks [late August and early September] that I’ve been able to get out. It still hurts to swing a sweep net.

“I was at Mirror Pool last week, and of all the times I’ve been there, it was the least productive collecting trip. That particular spot has been overrun by exotic vegetation, broom grass and wormwood, non-native species that displace the vegetation that native species feed on, the native species of flower.”

There’s also the impact of spurge and cattle grazing. Because of competing interests in the management of the grasslands, the Forest Service, Fauske explains, has little choice but to follow a least viable population strategy. In practice this means trying to do whatever they can to satisfy everybody. Biologically, everything is maintained at its lowest level. It is a necessary strategy, but one that has potentially dangerous consequences to plant and animal species.

Given the poor conditions for lepidopterology, we get lucky in our quest. We leave the H. R. Morgan Trail and return along the steaming Sheyenne River back to Mirror Pool. Flying around us in the waist-high slough grass are yellow butterflies with black spots, Clouded Sulphurs, a common species that ranges statewide in North Dakota. Next, we locate a Least Skipper; weaving and bobbing among the oxbow pools, the little, copper-colored butterfly is specific to this riverine habitat.

And finally, some Monarchs appear. Already beginning their southward migration to the central mountains of Michoacan, Mexico, their spectacular black and orange markings are strikingly contrasted by the purple of the vervain they feed upon. One large male Monarch, identifiable by his narrower black veins and brighter color, leads us west along the rutted, two-track dirt road in the direction of our vehicle, and we follow along at a jog as he tumbles and glides from one stand of flowers to the next.

—Shadd Piehl



## A QUICK 26.2 MILES



Meg Grindall's morning was not going well. The night before, she'd drunk two cups of coffee at dinner before she remembered she needed a good night's sleep, and then her mother-in-law knocked on the door at 6:15 a.m., an hour sooner than expected. Four hours of sleep is no way to prepare for a 26.2 mile race, but the race is run on schedule, and so Grindall pulled on some old shorts and the shirt she'd bought the night before, braided her long, curly hair, pinned on her number and lined up. Three hours, four minutes and forty-four seconds later she would surprise everyone and cross the tape as the women's winner in the 2006 Fargo marathon, notably ahead of two runners who some had heard were in town to try to qualify for Olympic trials.

Those women missed that mark, no doubt frustrated by the strong north wind that blew against them all morning and their own troubles of the day. They probably don't begrudge Grindall her win, but they might blanch to learn that this woman who ran faster doesn't train, she just runs. One of the first rules they teach you in marathon school: never wear something new. Grindall isn't defying the rules, she doesn't know them. Unlike nearly everyone else on the course, she's not obsessed. She doesn't time herself on training runs, and only estimates how far she's going, but it's probably not more than about twelve miles, more often five to ten. The rest of the field, from the serious to the slow, is glued to a schedule — a holy bible of specific days, paces and distances, including several training runs of eighteen to twenty miles. They wear wrist-sized global positioning systems that feed all kinds of details about pace, distance, even heart rate, allowing runners to meet the demands of the schedule precisely.

Grindall won the second race she ever entered. She ran 3:31:38 for 7th place in the 2005 Fargo marathon. Both times she qualified for the Boston Marathon, the ultimate achievement of many marathoners, but she's not going. "I just wanted to improve my time over last year. There's no rhyme or reason to why I finished where I did." She doesn't say "I won" very much. Though she is modest, her competitive spark flared up during the first twelve miles as she and another woman, who Grindall had noted at the start was

wearing a serious looking outfit, took turns leading. But she got annoyed when the other runner seemed to try to cut her off, so she decided to pass her and stay ahead. After crossing the tape at the finish, Grindall was surprised to see her time, and happy to be done. "I wasn't overexhausted," she says, "I just didn't want to run any more."

She's 25, a 2004 graduate of the dietetics program at North Dakota State University. Back then, her name was Meg Twomey. She got married in August 2005, but has been too busy with an internship to have had a honeymoon yet. In addition to the \$500 purse, she won a round trip airline ticket, so she and Shaun are going to Florida late next winter. They've decided she'll run the race again in 2007, but then take a break to start a family. She feels no pressure about defending her title. "If I get the same time, or better, that's fine. If not, it might not be my day."

No competitive track in high school, none in college. She started running in high school, just a couple of miles a day for her own relaxation, and maybe four miles a day in college. After graduation, she lived on the edge of town near a road that stretched for many miles, so she ran it. She decided to enter the marathon after her boss ran the Chicago marathon, a huge affair of 40,000 runners, and urged her to do it the next year. She's not up for that kind of crowd, but did enter the fledgling Fargo race. In 2005, the first year a marathon's been run in Fargo since the early 1980s, 711 people ran the full marathon; in 2006 that number was up to 982. More than 5,000 runners competed that day, in the full, the half marathon and the 5 K.

She is interested in improving enough to have gone out to Scheels sporting goods store the day Dick Beardsley was there to answer questions. Beardsley is a running guru, has a number of marathon achievements, including having run the fourth fastest men's marathon in U.S. history, and hosts a half marathon in Detroit Lakes, Minn., each fall. He gave her a few tips and talked to her about taking a shot at the Olympic trials. She'd only have to shave another fifteen minutes or so, but to Grindall that sounds like it would involve a lot of structure. "I'd rather do it for fun."

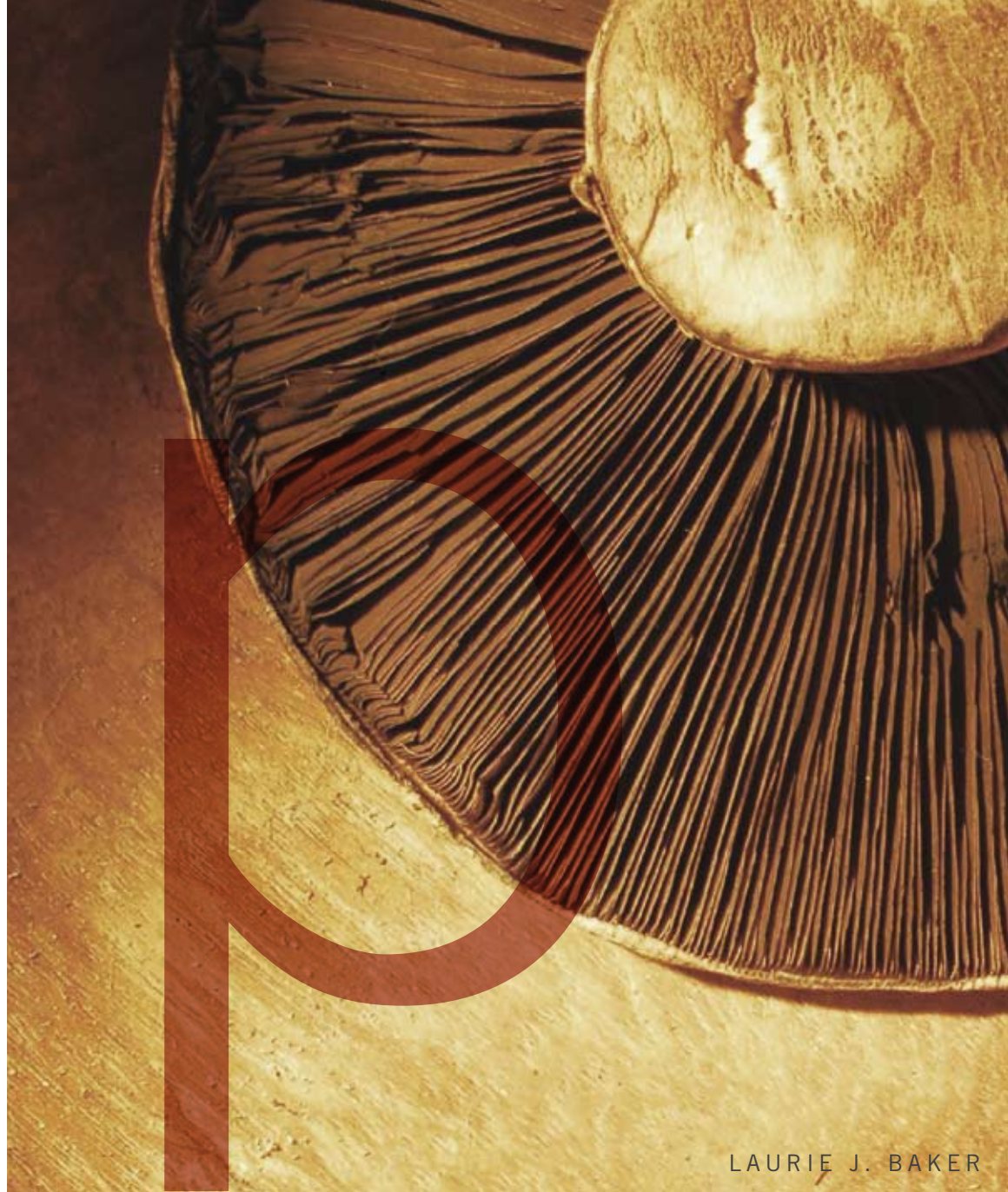
—L. McDaniel



A close-up photograph of a dark, textured ceramic bowl filled with ramen. The bowl contains a light-colored broth, thin white noodles, and several pieces of brown, seared meat. Two wooden chopsticks are resting in the bowl. A large, semi-transparent red watermark with the letters 'SOI' is overlaid across the center of the image.

SOI





LAURIE J. BAKER

I have a story to tell about food. A Woman (nearly a Child) from Sierra Leone moves from country to country on her own calloused feet, fleeing war, living in refugee camps, eating white rice and little else, watching others like her die from malnutrition because they lacked protein. (In Africa, in any poor land, meat equals wealth and health.) With her wits, a tiny square of soil and seeds from the United Nations, she ekes out a little better living than her neighbors, trading and selling vegetables to other refugees. After years of this, somehow, (a miracle? a bribe?) she wins the refugee lottery and is transported to the United States — to Fargo, North Dakota. The landscape change alone overwhelms her. The cold is like the heat of Africa turned upside down — it burns. Although her American house is roomy and warm, she doesn't know how to use the appliances. There were no refrigerators in her village and no electric stoves. When she was eight and living on the shores of the Atlantic Ocean, her auntie built a smoky fire on the beach and began to teach her how to salt, smoke and dry meat — mostly fish — so it wouldn't spoil. Because everything preserved was dried and water itself was a precious food, the daily fare was soup. Her mother made as many varieties of soup as there are Midwestern hot dishes.

It's lunchtime. I make a rainbow salad of baby romaine leaves, smoked dulse, a dark red sea vegetable loaded with iodine and minerals, carrots and sweet grape tomatoes, along with a protein smoothie of blueberries and yogurt, and reheat a cup of creamy squash soup in the microwave. All organic, naturally. Is there any food as comforting and perfect as soup? It is ubiquitous — go anywhere on the planet and you will find soup. It may contain unusual ingredients, but it is immediately recognizable as a familiar food. I am reminded of my first bowl of Tom Ka Guy, a sweet and spicy Thai soup made with coconut milk, lemongrass and Kaffir lime leaves, those

bright green slivers from the wild lime tree that give Thai food one of its unique flavors. Nothing was familiar but it was clearly soup and therefore comforting and safe.

As I crunch and sip, trying to learn to go slowly and not read while I eat, I find myself thinking: How much did this meal really cost? Who picked these luscious vegetables, harvested the dulse, milked the Holsteins? Though I feel grateful for the gift of food, my thanks tends to be to an unseen force who I imagine manages the big picture of my life the way I managed the lives of my children — making sure the needs I could perceive were met. The poet Dylan Thomas called it “the force that drives the green fuse through the flower,” an image I’ve always loved. Yet shouldn’t my thanks be instead addressed to the farm laborers who did the hot and dirty work of harvesting my lunch? Later, I snack on filberts and realize that I’ve never wondered where they come from or when they ripen. Are there hazelnut orchards?

Thinking about food can lead to interesting places (in addition to the refrigerator). Food evokes an emotional response, connected to a need, our need for sustenance, comfort, nurturing — as infants, being fed satisfies basic needs in addition to hunger, especially as it most often involves being held and touched and seen as well as fed. Close your eyes. Can you visualize yourself as an infant — bathed and swaddled in pastel receiving blankets, gazing up into a face that fills your sky and radiates love as ambrosia flows into your mouth and tummy, held securely, melting with warmth, the twining rhythms of a steady heartbeat in one ear and a gentle voice murmuring lavish compliments in the other. How utterly unsurprising that food and happiness are inextricable for so many — whether you were given that deep connection with food and love or yearned for it.

As kids we ate dirt — beans and carrots fresh from the garden, just brushed them off or rinsed with the hose. I couldn’t understand my mother’s obsession with having every speck of dirt scrubbed off the potatoes or her reluctance to work in the garden along with Dad and us kids. Mother hated dirt. The intensity of her campaign to eradicate dirt made me a good housekeeper, but the lessons were harsh, nothing was ever clean enough, good

enough. It’s a familiar story. I’ve wondered how it connects to being the child of Norwegian immigrants — new to this country in the 1890s leaving behind the mountains and abundant waters of Norway for the dry prairie with its winds full of soil and a house made of sod. No refrigerator there either, no electricity, no plumbing for a long, long time — until the youngest of their nine children (my mother and her baby brother) were in school. They raised their meat (and gave them names like Bossie and Ruthie), hunted eggs every blessed day, hauled endless pails of water to keep the garden alive, shot skunks and gophers, killed snakes with a garden hoe, hid out from chores in shelterbelts and haymows. The meat — that precious protein — was salted and canned, smoked and dried. The grain, not rice, but wheat, oats, and barley, was stored and the battle against rodents was as unremitting as work and weather.

As an adult I am again eating dirt — only this dirt comes in a jar, sealed for my protection. It is Bentonite, marketed as “living clay,” it is said to provide those hard to find trace minerals, to absorb heavy metals and generally detoxify the highly-stressed modern digestive system. Besides the clay, I take a whole regimen of nutraceuticals aimed at changing my cell function from that of a 1959 Edsel to a 2007 Prius. At least the side effects feel natural. The conventional alternative was surgery and taking pharmaceuticals with nasty side effects for the rest of my life. In spite of my rather jaded view of Western medicine it is reassuring to know if better health through healthy living fails me, the man with the scalpel will still be there.

I am a volunteer for Hospice, which means I sit with people who are actively transitioning (dying), mostly at nursing homes. It’s July. I am sitting with a woman who will die in the next day or two. There is an extension service calendar from North Dakota State University pinned to one side of yellow wallpaper that is otherwise covered with photos and drawings of a beautiful young woman and her handsome, iron-faced soldier. It is this woman, once a war bride and a “Rosie the Riveter.” A 40s pinup girl with luxurious curly hair and slightly hooked nose. Is she Spanish? Indian? Romanian? Italian? She remains lovely in her illness and old age, finely featured and her skin is smooth.





Thinking about food can lead to interesting places. Food evokes an emotional response, connected to a need, our need for sustenance, comfort, nurturing.



While refugees and other New Americans have food skills within the context of their own cultures, those skills don't always translate to Western practices.





Photos by Marsha Miller

The NDSU calendar is small, 10x8, with white plastic binding and in the lower left corner is the July Food Safety Tip: “Throw away picnic leftovers unless they’re kept at safe temperatures. Food left out for more than two hours may contain harmful bacteria that could cause food-borne illness.” A “Stretch Your Food \$\$\$” reminder to “choose meats carefully and to pick lean cuts for health and economy” spins me back to food, to immigrants, to thinking about our cultural relationships with food. It reminds me of Ritual Argument, a communications theory that explains how saying the same things over and over again helps a group figure out and confirm what it believes.

What do we believe we know about food — which we think is our unique knowledge — and what are our coping skills when that knowledge is challenged? For example, Europeans think the U.S. obsession with health (read food) is cracked — especially our mandatory six to eight glasses of water per day. Paying outrageous prices for refiltered tap water because we think it is somehow more pure (read healthier). Pure foods are healthier. This assumption is fueling a booming organic food industry and what was once the “lunatic fringe” is rapidly becoming mainstream. What do

we know about our food? Kids in cities (even, dare I say, Fargo or Bismarck) do not connect the pristinely wrapped meat on the groceries’ shelves with the muddy haunch of a living cow. They don’t connect a silver-wrapped granola bar with their uncle’s soybean crop or chocolate with the diminishing rain forest.

In places where clean water is a precious commodity, rather than an assumed convenience, water doesn’t come through a stainless steel tap via a chemical treatment plant. Before coming to the United States, the woman who started my story ended up in Ghana in a refugee camp, where water came directly from a stream and the nearby swamp. Because boiling takes precious fuel, the water is only purified when it is used to make soup. Can you see the brilliance of this adaptation? Soup not only purifies the water, it reconstitutes dehydrated food; put it on a fire and walk away — no need to squat beside a hot fire in equatorial temperatures.

While in the last camp, our heroine is reunited with the children she lost during the war. They are not dead. They come with her to Fargo. They like it here. Now, she buys bread at Kmart and freezes it; makes four kinds of soup on Saturday and freezes it; picks up enough goat meat at the African market to last three weeks and her rice, dried fish and palm oil at the Asian Food Market. Western grocery stores are for milk, juice and eggs but she avoids the big box stores as much as possible because she feels envy at their superabundance and longs for things she cannot afford. She prefers to be content with what she now has, in contrast to life in the camps. Indoor plumbing is a constant joy.

My mother made a counted cross-stitch sampler of an outhouse for her tiny peach bathroom: “On a cold dark night, in a sleepy haze, be glad these ain’t the good old days.” She grew up with outhouses — a hole in the ground, recycled paper and my Norwegian grandmother’s constant admonitions to wash her hands. My mother’s outhouse is only 65 years in her past. She can still recall the grain of the wood, her fear of skunks and the dark, the summer smell. Smell is a critical test for hygiene, for safe food, for safe air and water. I wonder if living with perfume, odor eaters, exhaust, and refrigeration dulls that sense in we city dwellers. My house is next to a small grove of trees — those almighty oxygen makers — I often step outside in the morning to enjoy the living air. Yet, when I was at a friend’s country home, closely surrounded by corn fields and shelterbelts at the peak of summer ripeness, the green smell was intoxicating, with a hundred times the aliveness of my back yard. It was air you could eat. It was oxygen soup.

Norwegians have a cultural reputation for caring about cleanliness. This may explain why I took so many home economics courses (that and the fact that girls in the 1960s couldn’t take woodshop, at least not in my school). We cannot leave our roots, they travel with us wherever we are blown. Julie Garden-Robinson is Norwegian, locally grown in Minnesota and educated right here, at NDSU, where she works as an associate professor and food and nutrition specialist with the extension service. Her passion for food and cleanliness led her to instigate a project that will help new Americans learn Western food safety practices. With nearly \$600,000 from the USDA, a three-year time frame, and a multi-disciplinary, multi-institutional team, the idea is to be a model for food safety education, including creating materials in formats that are interactive, multi-lingual, and Web-based, potentially making the information available world wide. The project is building on all of

Garden-Robinson's past experiences teaching food safety and if it is not yet the culmination of a career, it certainly gleans the best practices. One of the beauties of the extension service is the simplicity that it brings to communicating about food safety. Four words to disseminate decades of research science among an entire population: Clean, separate, cook, chill.

While refugees and other New Americans have food skills within the context of their own cultures, those skills don't always translate to Western practices. How do you connect with these New Americans, many of whom end up working in commercial kitchens and other food-handling environments in their first days of employment?

Garden-Robinson's partner in this unique project is Kathleen Slobin, a sociologist with lots of experience in Africa. She interviews New Americans — drawing from them the stories of their exile, the precious memories of home; determines what information the researchers can use in developing their educational strategies. It is rare to be asked for these memories — what did you eat, how was it obtained and prepared, did your family members have individual roles to play? Among the New Americans participating in the study there is eagerness to tell these stories to a willing listener; eagerness to shed light where there is a tendency to assume that the Western way is the best way — that those lacking in the luxuries of material civilization somehow also lack the skills to protect themselves. At some level, everyone knows that food can easily become poison to our fragile human bodies — if it is old, unclean, contaminated it becomes the pathway to disease and death rather than to health and life. We saw it on the news when the system that should have supported the victims of Hurricane Katrina broke down and thousands were crowded into space that lacked the food, water, and sanitation that we take for granted every single day.

In North Dakota, in winter, we worry sometimes about our dependence on electricity and envy people with fireplaces and wood stoves. We stock up when big storms are forecast and wish we'd bought that generator when it was on close-out. (Though it always seems so expensive once spring arrives and we've survived another cold season.) We don't like to remember that we, too, are fragile and vulnerable in the face of nature or war.

Slobin has lived among many cultures, observing, engaging, and contemplating what she experiences. She pays attention to tiny details about daily life, carefully mapping them, because through the details she can discover common themes and threads that reveal a larger pattern. She's working from theories laid down by other social scientists and her own knowledge and experience. From her analysis of the interviews she unfolds the picture of what refugees and New Americans know and need to know about food. Her work is like a cloth weaver. In weaving the pattern is called a cartoon. The loom is strung with strong threads to make the warp — the underlying structure on which the picture can be woven. This is a good metaphor for social science, as it seeks to make whole cloth out of many complex threads of information. Slobin finds her warp threads, the underlying structure of her analysis, in the writings of Mary Douglas, an anthropologist who said our ideas about dirt (by which she meant any uncleanliness, pollution, or contamination) make up a symbol system that helps all humans organize their environment. One

of the valuable things about the Douglas theory is that it doesn't hinge on religion or moral values, which can get in the way when trying to draw findings from a diverse group. Douglas says dirt is a problem of order and we are all subject to its rules. Slobin applies Douglas' ideas in analyzing the interviews in part because people apply deeply held ideas about dirt not only to hygiene and food but also to how we uphold social rules, such as the taboos against public drunkenness or the regulations governing an entire battalion of agencies that oversee food handling in the United States.

Douglas said that our busy efforts to scrub and clean are a way to focus and control experience and not mainly to avoid disease. Instead, she said, "We are separating, placing boundaries, making visible statements about the home that we are intending to create out of the material house." Somehow this all rolls together in me: order and the loss of order, my Mom now aging and losing her battle with dirt and disorder; a refugee, now an American, and her appreciation for a refrigerator; my own practice of gratitude and simultaneous awareness of how far I am removed from my own food. Packaging gives us the illusion (and some assurance) of purity. It says "this food can be safely consumed." Mass production creates a need for monitoring and a system of recourse for damaged or dangerous food. We are grateful for these protections. But now so many nutritionists and diets tell us to eat what is locally grown — soonest from garden to table is richest and most healthful. These are the themes of all Garden-Robinson's food safety materials: Clean, separate, cook, chill. What is alive in you? Why the very foods you eat.

Nature is harsh. We are here on sufferance. We have the bounty of this garden but only if we tend it. We have our ways — Nigerian and Kurd, Vietnamese and Norwegian. We have our unique foods and the rituals of our cultures. What we have in common are feelings and needs — fear and anger at war and displacement, starvation and wanton death; confidence and contentment at shelves stocked for the coming winter; needs for safety, for order, for connection. These needs are pan-human. They transcend greed and politics. They are soup.





# A good man in Africa





**O**n an evening in October 2002, when the days were short and the ground carpeted in pinched, brown leaves, Isidore Udoh hurried through the sharp autumn air into the warmth, shrugged out of his jacket and said hello to his friend. He was looking forward to dinner with her in her north Fargo kitchen, full of the good smells of roasting meat and the oddly comforting sounds of evening news from the television in the next room. A stack of mail awaited him. Udoh sifted through the letters, eager to catch up on the latest news from his family in the Niger Delta. He carefully slit open the top envelope and pulled out a sheet of blue-lined notebook paper, covered with his father's handwriting — a strong, neat script perfected by years of writing lessons on blackboards for grade-school children. "It is very difficult to tell you this," the letter began, "but so many bad things have happened lately. The worst of them is that your cousin Isaac has died."

Pain shot through Udoh's stomach. He and his younger cousin Isaac Okon had grown up together. They had run along the dirt roads of Udoh's village, kicking the hard green oranges that substituted for real soccer balls. They molded wet sand into the shape of fast-looking cars, using captive fireflies as headlights. Udoh had laughed and clapped when Okon, tall and thin as a branch, entertained the family by moonwalking like Michael Jackson.

Now his cousin was gone. Udoh's heart pounded as he read the details. Okon had moved to the coastal city of Port Harcourt to find work in the oil industry. He had contracted HIV. Too embarrassed to tell his family, he suffered alone for months. When his family finally brought Okon home, he was emaciated and covered with sores. The hospitals in the rural Delta were scarcely equipped to handle a patient with full-blown AIDS, and Okon's family couldn't have paid the bills anyway. He died at age 26.

Tears fell down Udoh's round cheeks and dropped on the letter, smearing the blue ink. The pile of letters sat beside him. Udoh dared not open them. What if they told of more death, more bad news? He was angry and confused. Why hadn't someone told him sooner? He had kept almost constant contact with his family in the last year, frequently exchanging e-mails with his own brother. Yet no one had mentioned Okon's illness. He could have sent money for treatment. He could have done something.



Stories of AIDS in the Niger Delta had circulated for years. Even so, Udoh never thought the disease would take someone from his family. He had been so vigilant about sending prevention information to his parents and siblings, and urging them to educate others. But he couldn't help his own cousin.

Sending money and pamphlets wasn't enough. He had to do something about the AIDS epidemic in the Niger Delta. He knew there were many obstacles to face — a corrupt government, a very poor population, deeply ingrained cultural beliefs. Another person might have looked at such roadblocks and given up.

Udoh comes from a poor family in one of the poorest regions of Africa. He has stood with young South Africans who sobbed over the graves of friends who died violent deaths. He has bumped down dirt roads in Nigeria in a tiny Toyota to help the poor, only to spend that night sleeping on the floor. He has surrendered the things so many take for granted — a wife and children, personal wealth, stability — to help others.

Udoh's life hasn't been easy, yet he traveled thousands of miles to earn a doctoral degree in education. He has begun to parlay that education into important research on the AIDS epidemic in his home country. He wants to use that research and his knowledge to influence Nigerian policy-makers to take action against the pandemic.

### Growing up in the Delta

As a child in the Delta, Udoh sometimes saw oil floating on the river. At first he thought the oily residue was something good — maybe an additive some responsible grownup poured in the river to clean it. Later he learned it was the unhappy byproduct of the neighboring oil wells pumping black crude near his village.

Long before the Delta became a major player in the oil industry, it was a wild and rural place. Located along Nigeria's southeastern coast, the region is a large triangle of wooded wetlands. The largest of its many rivers, the Niger, floods for months at a time. When the floodwater recedes, it deposits a rich sediment that nourishes the farmland. The many bodies of water brim with shellfish and fish. For decades, the heads of Delta households fed their families by fishing and farming.

Half a century ago, geologists discovered a massive oil reserve beneath the Delta. Wells were drilled and deals made with the government. Some villagers danced in the streets when the oil companies

came. At last there would be money for better schools and hospitals and roads. Or so they thought.

Today the Delta produces 2 million barrels of oil a day, which makes up 90 percent of Nigeria's export earnings. Yet the Delta's residents remain among the poorest in the world. Corrupt local government officials divert oil money into their own pockets. Irresponsible drilling practices have tainted the area's water, killed its fish and destroyed vegetation. Even more disturbing are the giant gas flares that burn outside oil flow stations day and night. Long ago, company officials found the natural gas that accompanied oil pumped to the surface was too expensive to capture, liquefy and transport. They've burned it off into the atmosphere ever since. The gas flares heat up the already tropical environment, roar like the Niagara Falls and fill the sky with acrid smoke. Many nights, residents cannot see the stars.

Gas flaring is so wasteful and environmentally devastating that it's become a rare practice in most places. But more gas is flared in Nigeria than anywhere else in the world. Reports vary widely on how much gas is flared in the Delta, but some sources claim it's the energy equivalent of 360,000 barrels of crude oil a day. Pressured by environmental groups, oil executives have vowed to follow a "flare-out" date, after which gas flaring would be illegal. But the flare-out date keeps getting postponed, and government officials don't seem overly concerned. Meanwhile, the flares cause acid rain and corrode the corrugated zinc rooftops of residents' homes. Many claim the pollution from the flares causes women to miscarry more frequently, their children to develop asthma and their men to urinate blood.



## Oil on the water

Forty years ago, no one discussed such things. Oil wells were as common as the mangrove trees that poked their stilt-like roots into the swamps. They were simply part of the landscape.

This is the world Udoh entered 41 years ago. A middle child in a family of eight, his father taught grade school and his mother traded agricultural products. In their village of Ikot Oko, the Udohs were a curiosity. Plenty of other families were better off financially, but they spent their money on houses and motorcycles and Peugeot. Udoh's family put everything they earned into education. His mother stretched the family budget by selling peppers, fish, beans and yams at the village market. His father sold off land and palm trees he'd inherited from his own father to pay for boarding school costs. Their only mode of transportation was a bicycle, which they sold to pay for one child's tuition.

They lived in a modest house with red mud walls and a thatched roof until 1986, when Udoh's parents finally saved enough money to build a real house with concrete-block walls and a zinc roof. Even then, they hung fabric over the empty windows and slept on the dirt floor until there was enough money for proper flooring and window glass.

From an early age, Udoh's intellectual gifts were obvious. His father was his teacher, and he expected much from his bright son. Once, when Udoh ranked second academically in a class of 150 students, his mother scolded him publicly. He never came in second again. At night, when he'd finished feeding the chickens and goats, he sat cross-legged on the dirt floor and studied by the glow of kerosene lantern for hours.

When Udoh later went away to school, he would come home for holidays. But "holidays" at the Udoh home were for anything but

leisure. Each child was required to read at least one book during the break, then to stand in front of the family and summarize it. Before long, Udoh had read and re-read all the titles in the house. He studied novels by African and American writers, books of poetry, and read about European, African, American and Chinese history. He lived in a village of 300 people in an isolated region of Western Africa, yet was as well read as an elite prep student.

Udoh's parents had noticed something else about their son. Not only was he intelligent, but he was likable and honest and good-natured. In fact, he was just plain good. He cared about others, and others seemed drawn to his generous spirit. To devout Catholics like the Udohs, his path was obvious. Udoh would become a priest. He was sent to his first seminary school at age 12.

He would never live at home again.

## Time with a holy man

Udoh attended a series of seminary schools — exacting institutions where the students wore white and black uniforms and risked a good caning if they didn't obey. But the schools were excellent. At the Queen of Apostles Seminary, 100 miles from his home, the teachers were priests from across the globe. Three of them had graduated from Oxford, and all but one had doctoral degrees. In this environment, Udoh gained a view of a world far beyond his village.

At the seminary, even among the top students of Nigeria, Udoh excelled. He could read, write and speak in several languages, including classical Latin. Showing a precocity for French, Udoh was one of a select few students allowed to take his high school examination a year early. He aced the test, but stayed on for the final school year anyway. Just for fun, Udoh retook the exam again the following year.

Even as Udoh's education opened his mind, it set him apart. When he went home to visit his family, he used words his village friends didn't recognize. His musical tastes ranged from the twangy sweet vocals of Dolly Parton to Tchaikovsky and the pop group ABBA. He talked of exotic lands, thousands of miles from the swamp forest of the Delta. His old friends shook their heads. Crazy Isidore. He might as well be talking about the moon.

Back at school, Udoh felt at home. He attracted friends with his contagious grin, good mind and willingness to help others. When he graduated from seminary school as a star student, he was asked to stay on as a teacher. He was just a few years older than his pupils, but they liked and respected him. They came to him for advice.



Udoh's parents had noticed something else about their son. Not only was he intelligent, but he was likable and honest and good-natured. In fact, he was just plain good.



He pursued his college education at several seminaries, ultimately graduating from Pontifical Urban University in Rome with degrees in philosophy and theology. After college, he dedicated himself to good works. At one point he interned with Nelson Mandela's office, although he rarely saw the legendary leader. He spent time in South Africa, counseling college students who had seen friends shot down for protesting apartheid. Most importantly, he worked with a holy man named Dominic Ekandem.

Ekandem had once been the Udoh family's parish priest, but had risen to the rank of bishop. His health was failing, and he needed help. Udoh became his aide. For the next few years, he accompanied the bishop everywhere. He drove his car, took notes at important meetings, even recorded his autobiography.

Ekandem was one of the most powerful religious leaders in West Africa, but he lived like a pauper. When the church offered him a limousine, he instead chose a small Toyota. When the government built him palaces, he chose to live in a two-bedroom apartment instead. Presidents of countries came to visit him in the modest flat.

For two years, Udoh slept on the apartment floor every night. You must learn to live like this, the bishop told him, so if you have a position of responsibility in the future, you don't forget where you came from.

The bishop built a home for pregnant teenage girls who were thrown out of their homes. He launched programs for Muslims who lived on the streets. He worked late and slept little, even though diabetes was overpowering his body and he had to walk with crutches. He refused to be flown overseas for treatment; instead, he insisted that money be used to house street people and abandoned children.

Ekandem died in 1996. Udoh never forgot what the great man taught him. Don't forget where you came from, Isidore.

## Out of Africa

Udoh is a natural at networking. He likes meeting people from all backgrounds, and he counts many as his friends. While still in high school, he became pen pals with a cardinal in Connecticut. That cardinal knew Bishop James Sullivan of the Fargo Diocese. They began talking about bringing Udoh, this outstanding young seminarian, to the United States. And that's how a young man from Nigeria's rainforests came to America's Heartland.

Udoh lived and worked at Holy Spirit Catholic Church. While at a church function, he met a bubbly widow named Barb Zacher. She offered

Udoh use of her kitchen for cooking his beloved Nigerian specialties. They hit it off immediately. After that, Udoh sometimes came to Zacher's place to cook fish soup. She couldn't stand the smell of the fish, but she liked the company.

One day out of the blue, Udoh called and asked if he could come over to her house. He sounded a little lonely. "Sure," Zacher said. Her kids were grown and her beloved husband gone. She sometimes got lonely too. Zacher was surprised by how tired Udoh looked. He was always so upbeat, so ready to let loose with that full-bodied laugh that made you want to chuckle too. She invited him to stretch out on the recliner in the family room and nap while she made dinner. As she clattered around the kitchen, she glanced at her young guest. His eyes were closed, and tears ran down his face.

"Isidore," she asked. "What's wrong?"

"I miss my family," he said.

"I'll be your family," she said.

On that day, Zacher unofficially adopted Isidore. He moved into the second-floor bedroom of her home. She became his support system, giving him a place where his Nigerian family could stay when they visited, financial help when needed and, for the first time in years, a real home.

The two are an unlikely pair. An outspoken woman with a thick-as-knoephla German accent and a polite Nigerian man who has traveled the world. But they are alike in ways too. Both are devout Catholics. Both have good hearts. And both needed someone.

The stability Zacher provided helped Udoh try different things. He questioned if the priesthood really was for him. He briefly attended North Dakota State University, then relocated to Washington, D.C., to earn a licentiate degree in canon law from the Catholic University

The two are an unlikely pair. An outspoken woman with a thick-as-knoephla German accent and a polite Nigerian man who has traveled the world. But they are alike in ways too. Both are devout Catholics. Both have good hearts. And both needed someone.

of America. He returned to the Midwest to work as a pastoral assistant at the diocese in Crookston, Minn. He was working at a Catholic church in Moorhead when he received the letter that changed his life.

### Anatomy of a pandemic

As the shock over his cousin's death eased, Udoh took action. He had picked up information here and there about AIDS in the Delta, but didn't fully realize how grim the situation was. Now he devoted all his spare time to learning about the pandemic. The average HIV-infection rate in Nigeria is among the highest in the world — 5.6 percent. But in certain parts of the Delta, infection rates soar to 15 percent. Before Nigeria became a democracy in 1999, the military government denied there was any AIDS problem at all. And so people continued to contract the disease and die. It's now believed that 3.6 million people have been infected, and 55 percent of the infected are female.

Experts have many theories why the Delta is such an HIV hot spot. Udoh's own theory plays out like a deadly domino effect. He believes the oil companies abused the land and environment, making Delta residents sicker and poorer. The government refused to use oil earnings for health care, social programs or education to alleviate the crisis. Volatile relationships among the local tribes kept communities from working together. The women, undervalued by the culture, had no education to do anything but farm, fish and raise families. When the soil went bad and the fish died, they turned to prostitution to feed their children. The local men migrated to urban oil centers to find work where, isolated from their families, they visited prostitutes. The oil industry brought workers from all over the world to the Delta. They also patronized prostitutes.

Udoh wanted to help the people from his home country, but he didn't know where to start. He was just a Nigerian scholar without money or influence. So he brainstormed with Nigerian friends on what he could do to help Delta residents. Together, they decided Udoh needed more education. He needed to learn about adult education and disease control and research methods. He had to adopt the language and training of a public health expert if he wanted to make a difference. Maybe then people would listen. One day, he decided to take a walk through NDSU's campus to clear his head. On a whim, he dropped by the Department of Human Development and Education. He asked the woman at the front desk if the department happened to offer an education doctorate.

Why yes, she said. We just started one last year.

He became one of the first students admitted into the program.

### 'Dr. Udoh,' at last

Barb Zacher's home is a modest, blue-and-white bungalow with Cape Cod touches. Blue shutters frame the windows, and two dormer windows — which belong to Udoh's attic room — jut out from the roofline. She loves to garden. The brick flowerbeds in front of her house are meticulous. Rose bushes — which produce heavy, red blooms as the summer progresses — flank the front steps.

The red flowers give Zacher's house a patriotic touch. That's no accident. She hangs an American flag outside every day, unless it's raining or snowing. Today, on Udoh's graduation, she's tied red, white and blue ribbons on the yard lights. It just seemed like the right thing to do.



The house is packed with well wishers, here to help celebrate Udoh's big day. A professional couple from Dickinson, N.D. An antiquarian — that's a collector of rare books — from Winnipeg. Even Udoh's younger sister Esther, who attends nursing school in Detroit, has made the trip.

The antiquarian, a bearded man named Jim Anderson, speculates why Udoh touches so many lives. "He is charismatic. He attracts people. I wouldn't say he's Christ-like, but he's accessibly humanitarian. He seems above the small things in life. It's more of a moral code. He works tremendously hard at humanitarianism, even though he's not endowed with fabulous wealth."

A priest friend snaps pictures of Udoh in the crowded family room, which is decorated with family photos and religious memorabilia. Guests squeeze around a table packed with deviled eggs, cold cuts, cut up fruit and sandwiches. A very large cake, edged in green frosting, reads: "Congratulations Dr. Isidore Udoh."

Zacher is front and center, beaming and imploring people to eat. "I'm the momma," she announces. "When they said, 'Parents stand up,' at the graduation, I was right there."

Udoh still wears the gold, green and blue hood of the doctoral student. He jokes he'll sleep in it that night. He has every right to be proud. He finished the three-year program in two years, often studying until 4 in the morning to do so. He has already been chosen by Columbia University to work as a postdoctoral fellow at its HIV Center for Clinical and Behavioral Studies. And he is the first person in his village to get a doctoral degree. When Udoh called his mother to share his achievement, she wept with joy.

Today's guest list also includes his professors. His adviser Ronald Stammen sees great things

for his advisee. Scholastically, Udoh has it all — intelligence, focus, a worldly perspective. Many international students are outstanding scholars, Stammen says. But some who come from rigid, authoritarian school systems struggle with the self-directed flexibility of the Western graduate degree. Udoh thrived. Other students came to him for help on the best and most efficient way to study.

Stammen also believes Udoh's determination to fight AIDS is more than naïve idealism. He points to the young man's incredible drive, his unflagging work ethic, his understanding of Nigerian culture. Columbia's faculty interviewed noticed it, too. Udoh has the intellectual gifts and the training, but he is no data-spewing wonk. He is warm and genuine and people want to talk to him. Such virtues could come in handy for a field researcher who might interview anyone from a New York street junkie to an African tribal chief.

Udoh himself speaks enthusiastically of persuading his Columbia colleagues to do studies on the Niger Delta. He knows such work is just the beginning. Besides doing important research on AIDS, he talks of literacy programs and health centers in the Delta and countless other projects. He says it in a way that you believe him, and you want him to succeed. For Udoh doesn't want to be famous or powerful or rich. He just wants to make a difference for the people of the Niger Delta.

—T. Swift

# EXCERPTS



**CRAIG BOHL** is in his fourth season as head coach of the North Dakota State University football team. His first full-time coaching position was as the defensive secondary coach for the Bison under Don Morton in 1984 when NDSU finished second in the nation with a 12-1 record. Since then, Bohl has coached on the Division I level for 18 seasons. He was the linebackers coach at Tulsa for two seasons, the linebackers coach at Wisconsin for two seasons, the defensive coordinator at Rice for five years, the linebackers coach and defensive coordinator at Duke for one season, and the linebackers coach at Nebraska for eight years. The final three seasons at Nebraska also included the defensive coordinator duties. His seasons at Nebraska included national championships with a Fiesta Bowl win in 1995 and an Orange Bowl win 1997.

A native of Lincoln, Nebraska, he was a reserve in the Cornhusker secondary from 1977 through 1979 under Tom Osborne and played on NU's 1979 Orange Bowl and 1980 Cotton Bowl teams. He holds a bachelor's degree in business administration from Nebraska.

He is very well respected, and his regard rose after his team played the Big 10 Division 1-A Minnesota Gophers to a 10-9 loss, a competitive game that came down to a field goal with one second remaining, but NDSU's kick was blocked. Coach Bohl made his position clear in the post game press conference: "North Dakota State does not believe in moral victories, and the guys in that locker room do not believe in moral victories."



There's a great deal of satisfaction that I get from helping another person become more than what they think they can become.

When a former player calls you up and says you know what coach I just want to thank you for what you taught me, the person that I am today, you played a part in that. That's the biggest reason why I do it, without question.

Some guys coach in the NFL, some guys choose to coach in college, some guys choose to coach in high school, some guys choose to coach in junior high. We're all at different stages where we're allowed to have an opportunity to have an impact on somebody. For us to go in in the recruiting process and develop a relationship where a young man's parents trust you and they value education and you're going to encourage them and help them become a man, that's why I choose to coach in college.

Part of a competitive nature is you certainly want to go out and play, but you know your compass inside gives you a standard of what things are really important.

Our university is founded on excellence, we're a competitive institution, but our institution does things with integrity. We feel like our football program is a part of our institution and we need to be right in line with that mission and that's why I'm comfortable working here.

Pressure from coaches usually comes from themselves. Where things get out of line is when universities lose perspective of roles in athletics and without question that has gone on in some institutions, and a lot of that is driven strictly by dollars that can be created and then all of a sudden sometimes standards are compromised in the sake of winning. This is why NDSU is a great place to work. We strive for victories but we're not going to do anything that jeopardizes the institution. We're going to do things the right way.

Deep within each person there is a resolve to be successful and there're times when you don't feel like you can accomplish something, but because of the situation you're in, you've taken yourself out of a comfort zone and so that gives you a foundation to say I've been here before I know what it's like to handle pressure, to be in a situation where there's a lot of adversity going on, but I can stay focused to accomplish what I want to accomplish. It just sharpens you as a person. Many times people I've talked to have said the lessons they learned on the gridiron were just as important as the lessons they learned in the classroom. Unless you've been in that arena you may not be able to understand that, but that's why we're part of the educational system here.

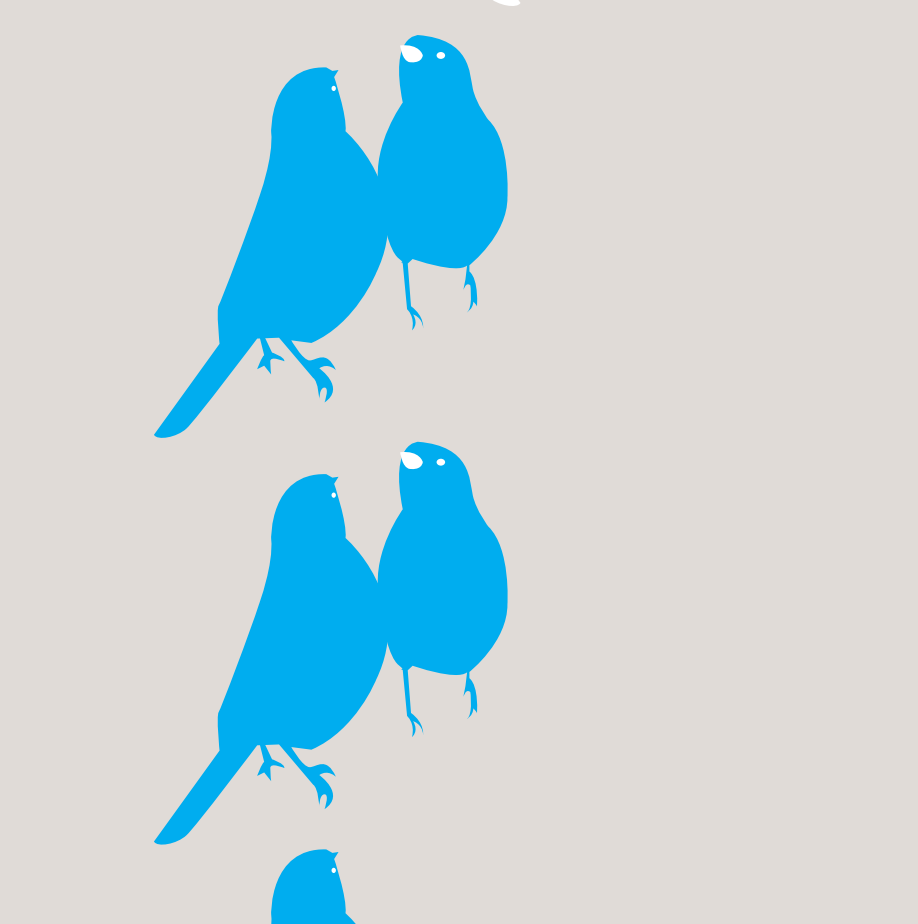
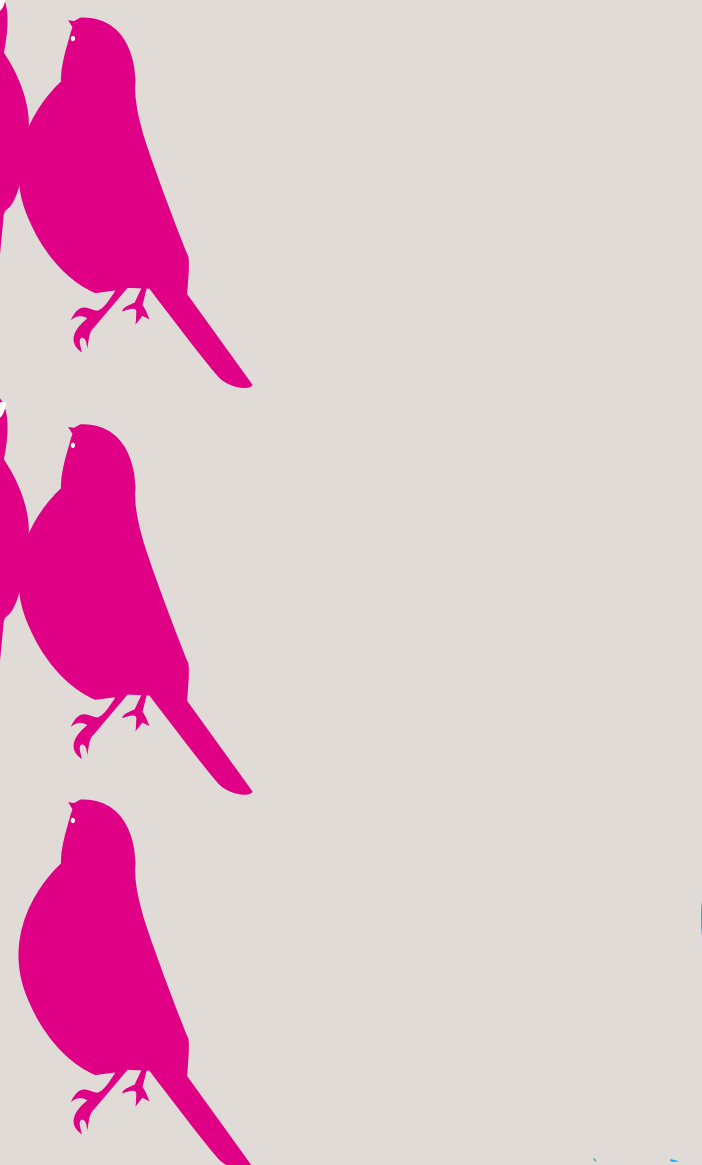
Competition brings out the best in a person.

I love fans.

I think what you find is when you've spent yourself, when you've given your best effort, you're going to walk off the field and feel really good about where you're at. That's what we ask of our student athletes in all the things that they do, whether it be in the classroom or on the field.

You go out and you identify people who philosophically are on the same line that you are and you find that the young men who don't identify with our mission here choose not to come to NDSU and that's ok. We end up attracting the guys who have bought into what this institution's about.

I have not gone to work a day in my life yet. Coaching is the only thing that I've done.



# feathered *Casanovas*

Tall pines dot the mountainside. Hardwood trees leaf out in bursts of vibrant green. Crisp air and peaceful quiet envelop the forest. Suddenly, the silence is broken with high trills in a complex melody of a feathered chorus, a song of romance as dark-eyed junco songbirds seek their perfect partners.

In the hardwood forest, the five- to six-inch juncos, a finch-like bird, nest on the ground or in shrubs close to the ground, seeking dark, moist, cool sites for their homes. The birds typically land somewhere and then run to their nests — mousing around — instead of flying directly into the nest. A biologist lurks in the area, setting two kinds of traps to capture them. Steel cages with netting are designed to catch the seed-eating birds humanely to avoid injury, a Wylie Coyote kind of trap. Or the forest may hide mist nets of fine mesh, as invisible as spider webs. Birds can't see them, will fly into the net and be captured, but only for a short time.

After a junco's capture, a biologist carefully administers light anesthesia. Clear, plastic, medical-grade tubing — similar to an I.V. in a human patient, only a few centimeters in diameter — is filled with crystalline testosterone. The biologist gently makes a small incision, and using a little tweezers, slips the small tube under the equivalent of the bird's armpit. Surgical glue closes the incision. The testosterone seeps into the bird through the permeable tubing. In this research study, some birds receive small tubes of steroids, while the control group is implanted with empty tubes. All are banded with a small leg ring to track them. The birds are handled fairly quickly and released as soon as possible.

This particular type of junco songbird is an altitudinal migrant — meaning it migrates up and down the Appalachian Mountains of Virginia, resting in the cool highlands during summer, moving down the mountain in winter. But from spring through summer, the birds' routines resemble speed daters who search for attractive mates. An army of voyeuristic researchers watches and records their activities, how many babies are born to each bird pair, and judges the birds' fitness and their parenting skills.

Researchers record information on breeding for each bird. How much does it weigh? Has it received extra testosterone? How many eggs are laid? How many nestlings do they produce? Do the babies learn to fly? Through binoculars, field researchers note how often birds return to the nest. Other researchers tape-record the birds' songs. Still others conduct DNA paternity tests. In all, the research team monitors more than 400 junco nests for nine breeding seasons.

## *A long-term testosterone trail*

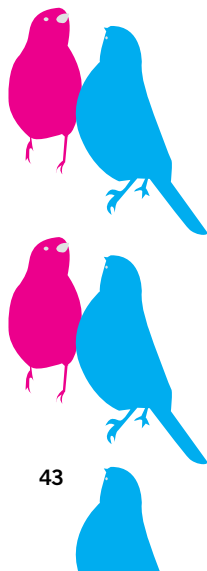
On the mountain, Ellen Ketterson, an internationally known evolutionary biologist specializing in animal behavior, leads the field research. She is a professor at Indiana University Bloomington, and often is cited among the top three researchers in her field in the world. North Dakota

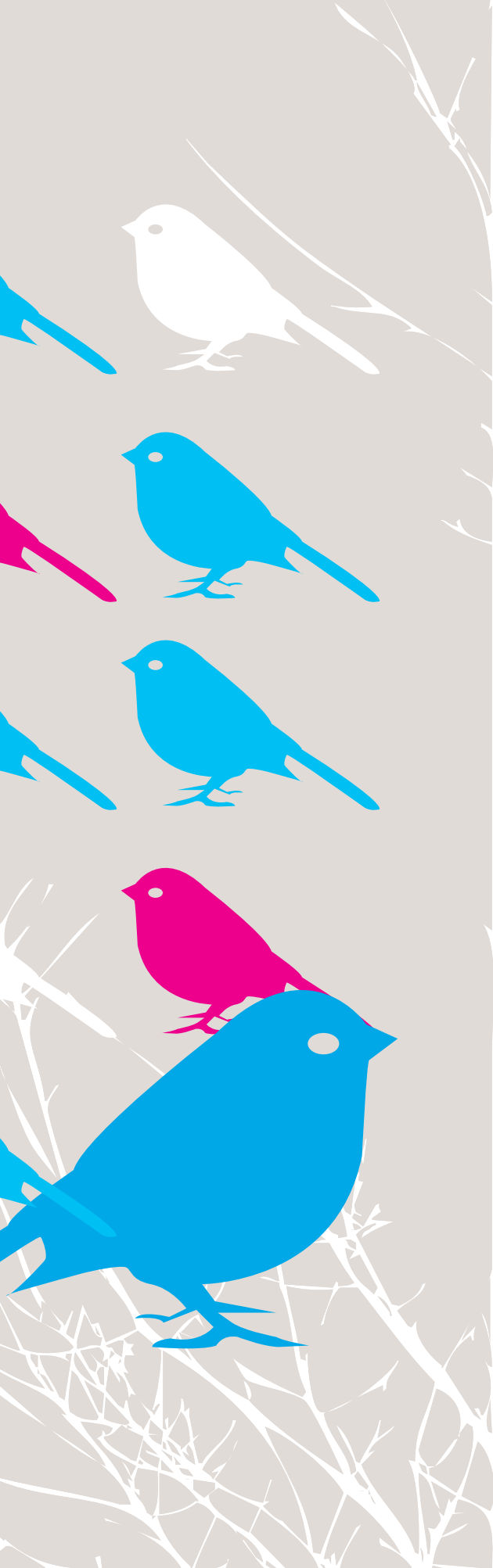
State University Assistant Professor Wendy Reed began working with Ketterson as a post-doctoral researcher before coming to NDSU in 2002. It's fitting the field research on romantic lives of juncos occurs at Mountain Lake Biological Station in Virginia, the same location where the popular movie "Dirty Dancing" was filmed. Some of the juncos, research shows, engage in a whole lot of avian dirty dancing.

Although dating and mating practices are unique for many species, there seems to be one constant — that inexplicable variable called chemistry. Female dark-eyed junco songbirds are drawn to males that sing the sweetest, fly the farthest, strut the sexiest. Their mating ritual is a story of testosterone and estrogen. "One hormone affects a bunch of behaviors," Reed says. "Think about humans. Somebody doped up on testosterone grows big muscles and maybe they're more vocal and aggressive. The same thing with birds. One single hormone affects a whole suite of traits." The hormone in question being the big T — Testosterone. Research scientists who use it for studies must be licensed to purchase the substance.

The hormone is called into question in everything from the Tour de France to the Olympics. Although banned from sports, some athletes try to get more testosterone into their systems as a way to swim faster, run farther or build muscle. The testosterone in birds is the same type of testosterone found in mammals and humans. While humans may define fitness as washboard abs, in an evolutionary sense, fitness is defined as the ability to reproduce and survive. In biology, the name of the game is getting your genes into the next generation. "It's a combination of being able to survive long enough to do it and then doing it," Reed says. "It" being, well, you know.

Juncos typically form a pair and bond for the season, but don't necessarily mate for life. Call them serial





monogamists. Both male and female in the pair provide for their young. “In that sense, they’re like a monogamous couple, working really hard to raise their young together,” Reed says. “They’re the middle class of birds.”

On the other hand, the birds pumped full of extra testosterone, it seems, are a bit more adventurous. In the polite vernacular of biology, it’s called “extra pair fertilizations.” These birds stray from their home nests, cheating on their partners. What makes them stray? Boredom with the same old forest scenery? A mate whose once-endearing qualities no longer hold any charm? Not really. It would appear the extra testosterone creates what some science writers call feathered Casanovas.

#### *Sweet song, but short lived*

The extra testosterone makes the males ardent, successful suitors. “In juncos, females are looking for males that are also going to be good parents. Age seems to play a role in this. Older males are typically better able to provide for them than younger males,” Reed says. “One thing that testosterone does is increase song rate and song is a way that a male attracts a female.” But like a less-than-truthful personal advertisement posted on an online dating service, young male juncos with extra testosterone start singing more and acting like older males. “Females find that to be attractive, so they’re kind of fooled into pairing with a high testosterone young male. And young males in the junco world aren’t all that good to be paired with. They’re bad dads.”

Seems the testosterone makes the young males want to fly farther from the nest. “They’re good

at making babies but not taking care of them,” Reed says. The testosterone-laden males don’t help at the nest as much and don’t help females feed the youngsters as much as males that don’t have high testosterone. “Young male juncos can talk the talk but when it comes down to walk the walk, they’re not so great.”

And while the extra testosterone-treated birds seem to have a good time, the testosterone brings repercussions. The adage “live fast, die young and leave a good looking corpse” applies to the young male juncos. The birds sire more offspring but have a shorter lifespan, because the testosterone boost weakens their immunity and lowers their fat reserves, making them more susceptible to disease. The testosterone also makes them more active, so they become more visible to predators.

#### *Finding the patterns*

Nine years of watching the juncos provides valuable data. However, stitching together nine years of data to discover patterns and make scientific conclusions requires something else — a numbers cruncher who understands biology. Reed happened to know such a colleague. “He’s a handy guy to be married to,” Reed says of her husband, Mark Clark, an assistant biology professor at NDSU, a population biologist. “I’m a numbers guy. I count things. I crunch numbers,” he says with a slight southern accent, stemming from his Tennessee roots.

Clark’s math background, quantitative abilities and computer programming experience allowed the researchers to synthesize thousands upon thousands of numbers gathered in nine years of research

on the mountain. These streams of data only take on meaning when the puzzle pieces fit together to reveal a complete picture. Imagine assembling a several thousand-piece jigsaw puzzle without a picture on the box to guide you. Ten or 20 years ago, Clark says, the computing costs to analyze the data would have been prohibitive. “We would have been running through that data for a decade or more before we would have gotten to the bottom.”

Even with advances in computing technology, between field research, data analysis, and writing the research results for publication in a scientific journal, the entire process took about 13 years of devotion to studying the romantic lives of the dark-eyed juncos.

#### Attention-getting testosterone

While the subject of testosterone might cause a chuckle, a wink, a nod, maybe even a smirk or a sideways reference to Viagra, the importance of the study is underscored in the attention it’s receiving in scientific journals and in the popular press. First published in May 2006 in *The American Naturalist*, a noted scientific journal, it didn’t take long for the study to generate worldwide interest. “Birds gone wild: extra testosterone makes males irresistible” was one headline from *LiveScience*. The international news agency Reuters and media outlets such as the Washington Post, CNN, MSNBC, CBC and *Discover* magazine carried stories about the research study.

One scientific reviewer who evaluated the study noted that “Results are novel and provide evidence of trade-offs that have rarely been documented before. This is

an important contribution to the field of life history theory.”

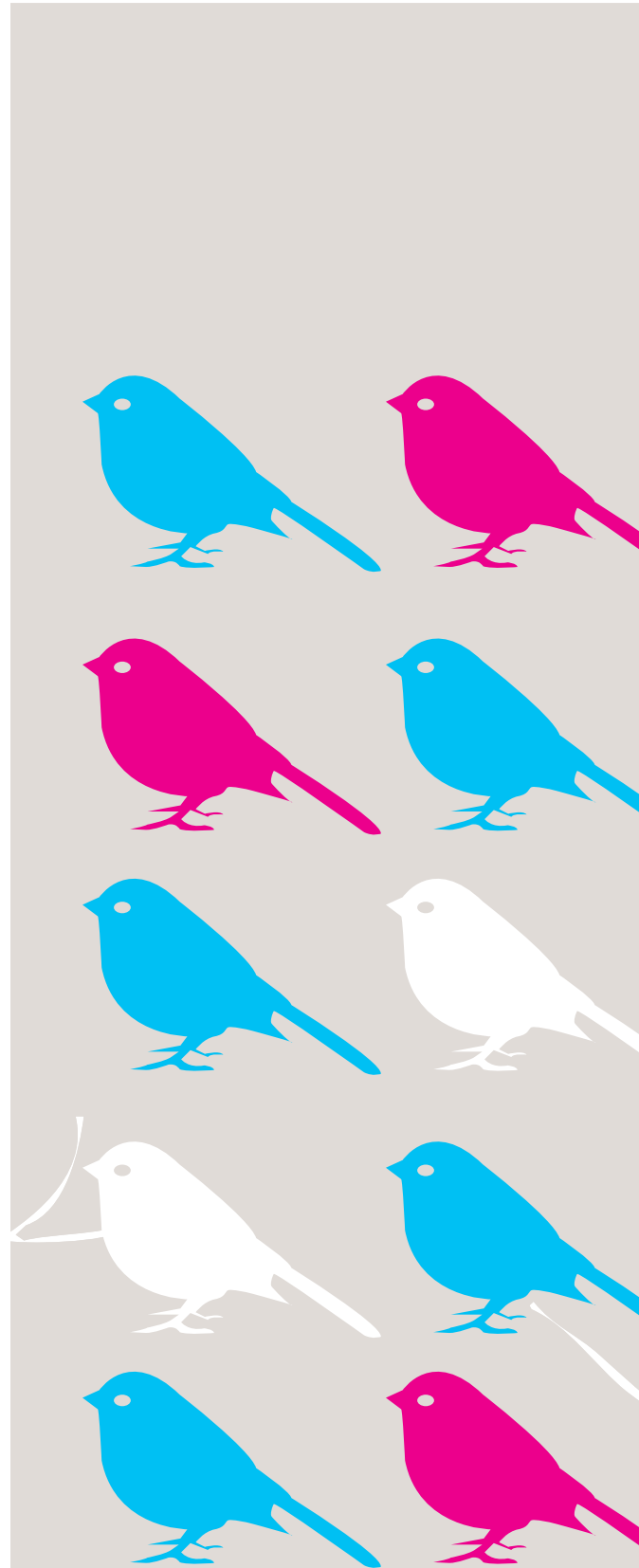
The University of Chicago Press Journals pointed out that while there have been studies focusing on testosterone levels, mating systems and aggression, there have been few studies that relate testosterone to fitness — the ability to reproduce and survive. As a writer for *Discover* noted: “A higher level of the hormone increases sex drive and attractiveness of males, leading to more offspring and increased evolutionary fitness; it also weakens the immune system, amplifies stress, and encourages recklessness, increasing the risk of departing the gene pool altogether.”

Results of the study show that male birds with what is considered normal testosterone levels had a 44 percent of surviving to the next year. For the testosterone-charged birds, only 38 percent of them had a similar fate.

“One thing I take away from this study is that with hormones, their effect can be far-reaching,” says Professor Mark Clark. “Yes, they may have positive effects in some contexts. But they may come at costs and we don’t fully understand that.”

Reed, for her part, isn’t bothered if the interest in the junco testosterone study is a little on the prurient side. “It’s about sex and testosterone,” she says. “Science is fun. And a lot of times, the best way to get across complex concepts is with a sense of humor. And of course, everybody wants to think about what this study means for humans.”

— C. Renner





# HER TREES MARCH

A writer's first trip to Fargo

SALLY ANN FLECKER

*Fargo*, I tell my little boy. The place Mama is going for her meeting is called Fargo. Ohhh, he says. Three-and-a-half and he already knows how to turn a noncommittal oh into the three-syllable sound that adults make to seem like they're listening. Later, when I call from Fargo to say good-night, I quiz him. Logan, I say, do you remember where I am? Where? he responds — his voice tinged with anticipation, as though I might be someplace exciting, like, say, Uncle Brian's. I'm in Fargo, I answer. Ohhh, he says, and turns the phone over to his younger brother.

Fargo, of course, has no meaning for him. Mama, as far as he is concerned, is either here or not here. He has no imagination yet that the world is big and that there are all kinds of places to live your life. And how do you develop that imagination, really? How do you imagine yourself into all the places you haven't lived, into all the lives you haven't had.

I'm a Western Pennsylvania girl, you should understand — that's the life I've had, the place that anchors me. Here is the story my husband likes to tell people when they ask why he left an established career in Chicago for Western Pennsylvania.

“I fell in love with a Pittsburgh girl. And I found out Pittsburgh girls don’t leave.” That’s not quite true. Pittsburgh girls do move away — my youngest sister, for instance. But she’s never stopped missing the hills and the trees and curves of the roads. And she’s never stopped wishing she could move back. My friend Peter, who is not a girl but is a Pittsburgher, puts it this way when he turns down an invitation. “You know I never go places I haven’t been before.”

The road to Fargo began, for me, in pitch black. It was so early in the morning that not even my dog took notice as I tiptoed out of the house, and it was so dark that I had no idea rain was brewing until I was at the airport. Even then, when the first lazy drops landed on my head I was preoccupied struggling my overloaded suitcase out of the trunk. It took me until I was out of the parking lot and stuck on the moving walkway behind a baby stroller to identify the splashes of water — oh, rain. My

## THE TREES IN FARGO TAUGHT ME TO SEE MY OWN LANDSCAPE BETTER. MY TREES, IT TURNS OUT, STAND SHOULDER TO HEAD. THEY MARCH UP OUR HILLSIDES UNTIL ALL YOU CAN KNOW IS THE HUDDLE OF GREEN, THE SPIRIT OF THE FLOCK.

mind is a lot more nimble when it is infused with caffeine. Not so, apparently, all the people who swarmed the airport security line at five-thirty in the morning. I had expected a ghost town — only me and the thirty-or-so other passengers on my plane flying out at first light. Instead, the airport was teeming with briefcase-carrying business people, parents with blond-haired immaculately-dressed toddlers, men and women with cell phones pressed tight to their ears (who in heaven’s name are they talking to?), and wives come to kiss their soldier husbands goodbye. A friend of mine, a regular traveler on his way to Albany, ran by me with a wide-awake smile. His plane doesn’t leave until 7:30, he told me, but he likes being there early.

By the time I landed in Minneapolis, the sun was up but lost behind an overcast sky. I wrestled my suitcase — why did I pack so much for five days? — off the baggage carousel, and headed out to meet my ride. Only later when we were on the road did gray give way to a blue sky filled with jellyfish clouds. I was lulled by the road until I began to see lines of corn flipping by with the precision of synchronized swimmers. That bit of optical trickery was worth the price of admission. Where I live, fields of corn don’t go on forever. In fact, nothing goes on forever. As far as the eye can see, in Western PA, pretty much means until the next hill gets in your way.

Actually, at home, I’m surrounded by trees as much as hills. Sixty-year-old pin oaks, tops reaching toward each other, form a shade cathedral down my street. The little woods of mulberry and sumac behind my house hide the back yards of the houses below. In summer, the hills you see from the parkway through the city are eclipsed by the trees, all the houses, streets, stores, and schools hidden neatly away.

But sometimes you can’t see the trees for the forest as I learned when I saw the cottonwoods that lined the Red River. First of all, I hadn’t expected them. Whenever I pictured going to North Dakota I had in my mind a landscape that was vaguely flat and open and the dusty color of soil before a good rainfall. Not a tree in sight. Not the cottonwoods or the shade

trees in the older part of town near the campus or the politely-sized trees on suburban grounds. I didn’t leave them out intentionally. I just never pictured them. That’s the way imagination is — sweeping and blithe. What makes a place real is rock-hard, the speck and grit — and spruces. What makes a place real are the things you can’t imagine.

I can go places I haven’t been before. But no matter where I travel, I’m that Western Pennsylvania girl, seasoned by the many gray days, shaped by the curves in the road, held by the hills and rivers. You have to look up to see the sky. You know your place in the world by what is at your back.

Who would I be if I came from a place where the rows of corn part and bow as you fly by, a place where the sky goes all the way to the ground? Who would I be if I could see what’s coming from a mile down the road?

The trees in Fargo taught me to see my own landscape better. Trees look different when they have a level ground. They can stand shoulder to shoulder, they can be individuals in a grove. My trees, it turns out, stand shoulder to head. They march up our hillsides until all you can know is the huddle of green, the spirit of the flock.

My boys watched for me the evening of my return. They stood on the front porch and when my car came down the hill and turned the corner, they ran out. The yard squished under their bare feet from rain that hadn’t let up much for the five days I was gone. Jumping up and down, bodies lightening along with their hearts, they crowded the car door, making it hard for me to actually get out until my husband cut through. Riley, the younger one, wiggled out of his hug with a shy smile and ran over to sit at the wheel of his big blue car. Later, I would chase him around the yard and he would sing out in laughter when I caught him. Logan held on to me in a tight hug for a long time, his small head anchored under my chin. He wasn’t going to let me go anywhere. Right then, my world was the size of his heart. I couldn’t imagine being anyplace else.

NORTH DAKOTA STATE UNIVERSITY  
Box 5167  
Fargo, North Dakota 58105

Non Profit Org.  
U.S. Postage  
**PAID**  
Fargo, N.Dak.  
Permit No. 818

[www.ndsu.edu](http://www.ndsu.edu)

