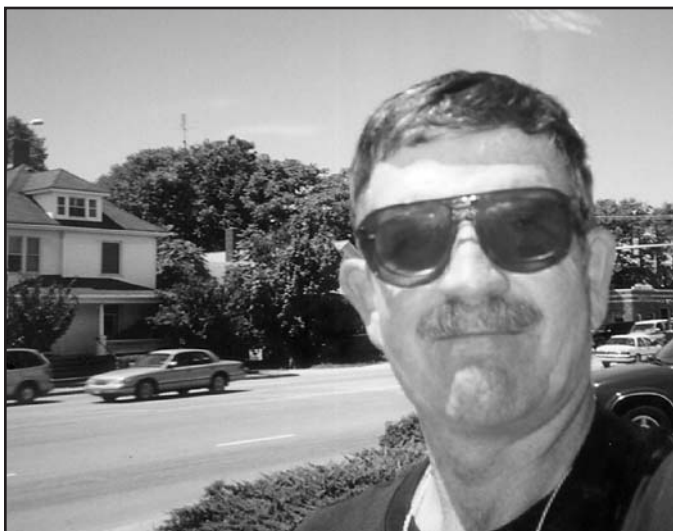


# DARE Newsletter

Vol. 4, No. 2

Dictionary of American Regional English

Spring 2001



Tim Frazer, DARE Fieldworker

## Memories of DARE Communities

Tim Frazer

*In our continuing series of reminiscences by DARE Fieldworkers, Tim Frazer remembers his introduction to the challenges and the rewards of linguistic fieldwork.*

Two truths to start out: First, I did only a tiny portion of the DARE fieldwork—five communities in southern Illinois. Second, I probably had no business being a Fieldworker. The very idea terrified me! I have since had much pleasure studying dialects, but I have been fortunate enough to have interested students, and sometimes a little grant money, to get others to do what seemed to me to be very difficult, challenging, and stressful work. I think now I could do it better, but then hindsight is always best.

When my assignment began in late 1969, most of the fieldwork was completed, and my job was to

*Continued on page 2*

## Funding Update

David Simon

Director of Development

Determination and loyalty: these are two qualities that I see in many supporters of the *Dictionary of American Regional English*. They are exhibited in a number of ways. There is certainly a strong determination to see DARE completed. That emotion has powered the *Dictionary* for more than four decades. There is also an admirable sense of loyalty connected to DARE. Many people have been DARE supporters for years. For some of you, the connection stems from an experience you had with the *Dictionary* or a DARE staff person in the 1960s. It is the loyalty of DARE's supporters that will enable us to reach the letter Z.

As I think about it for a few moments, I am not surprised that determination and loyalty would be qualities displayed by individuals interested in the *Dictionary of American Regional English*. After all, those qualities were an important part of Professor Frederic G. Cassidy's professional life. Fred worked tirelessly to start the project and to keep it alive in its early years. He was fiercely determined to produce a reference work that would be of the highest quality and would be used by generations of people. As the immense size of that challenge became clearer to him, he became even more determined. Some people suggested that Fred "hurry up the process" of completing DARE by taking a few shortcuts. He did not consider that to be an option. Professor Cassidy maintained a loyalty to the idea of producing the *Dictionary* as the definitive resource on regional and social dialects in the United States.

*Continued on page 7*

cover several unfinished communities in south-eastern Illinois. Since I was to be located in Decatur, where I had secured a job at Millikin University, I was given four Illinois communities that were within a day's drive (by that time, Word Wagons were a thing of the past). Two other communities, Cairo and Carmi, were deep in southern Illinois, farther away.

When I started in Charleston, I had no idea how to go about finding an informant. In fact, I was so intimidated at the idea of going into a strange town and trying to explain what I wanted that I put off the start of fieldwork for months. A call from Ann Hausmann, who at that time ran the office in Madison, let me know that Mr. Cassidy was getting anxious for my contributions. So I gritted my teeth and started out for Charleston.

With no better idea in mind, I went straight to the mayor's office in the City Hall, where I was told I could find the mayor in the bowling alley he ran. On to the bowling alley, where I sat down behind the bar and tried to explain what I was doing. When I convinced the mayor that I was not trying to sell something, he gave me the name of a retired schoolteacher (by then selling real estate) who was also a well-known local historian and storyteller. Informant IL114 was excited to talk to an English professor (actually I was only a non-tenured instructor with, at that point, about three months of experience) because he had published his autobiography and was starting on a novel. It took me a couple of trips to Charleston to finish the questionnaire, using two additional informants whom my writer friend helped me find.

This gentleman did so much to help me get my fieldwork off the ground that I wanted to reciprocate. But he wanted me to help him get a novel published! Me, an A.B.D. [=All But Dissertation] greenhorn with most of my coursework in early British literature! I had no idea how to write a novel, much less publish one. But, too full of youthful pride to admit it, I put him off, which I now regret. I would like to know if he ever published his novel. It's probably too late to ask him; when I began to write this, I looked him up in the "List of Informants" in Volume I of *DARE* and found that he was born in 1897. At this writing, that would make him 104! He was a pretty good storyteller, I remember that—I have used his tape in my dialect classes.

Finding informant sources for the other communities was much easier, because by this time I had made friends with students both at Millikin and at Eastern Illinois University. Except for Carmi, travel was no problem. Eastern Illinois, and Interstate 57 that runs north-south through it from Chicago to Cairo, is mostly flat, open, with big-sky prairies, until you get to the Ozark foothills south of Mt. Vernon. To the east is the Wabash River, and Carmi, Paris, Olney, and Greenup all lie between I-57 and the Wabash River, all on creeks that drain into the Wabash. This was an early settlement route, almost 200 years ago, for settlers moving north from Kentucky, which is the main reason that the pronunciation of English in these communities is so reminiscent of the Southern Uplands.

Thirty years ago traffic on I-57 was light, and I could cruise at 85 miles an hour in my 1962 Cadillac, a splurge (\$800, 50,000 miles) resulting from the euphoria of having my first teaching job and the first "real money" (\$7200 a year!) of my life. So my interviews were mostly an hour or two from where I lived. Students at Millikin put me in touch with Informant IL126 (in Paris), who was the local history expert from Edgar County, well-versed on the early legislation that sold off the land in that area. In Greenup another student, this one from EIU, put me in touch with her boyfriend's mother, IL135, who despite obviously poor health gave me the largest part of the interview, fixed me several lunches, and helped me find an auxiliary informant who grew her own popcorn, the best I have ever tasted.

I actually got to know most of the Illinois *DARE* communities better after the fieldwork was finished. I relied heavily on *DARE* for data for my dissertation on Illinois dialects, and in 1971 I came back to Madison to copy some questionnaire entries; in 1974 I came back again to listen to tapes for a regional pronunciation project. Three of the tapes I listened to repeatedly were made by Fieldworkers Diane Kutzko in Nauvoo and Carthage and Barbara Myhre in Beardstown. Ironically, I now live within an hour's drive from these and two other Illinois *DARE* communities, Quincy and Galesburg. And I have had a chance to watch these places change. It would probably be hard to find someone in Quincy or Galesburg today who knows what "light bread" means (it's a Southern word for "white" bread, which is still sometimes called "boughten bread" when purchased at the store).

Other changes are even more visible. Both Nauvoo and Carthage are important in Mormon history. One of the Carthage informants talks favorably on her tape about Joseph Smith—she was, after all, his great-grandniece. She was a member, in 1967, of the “Reformed Church of Latter-Day Saints,” the branch that did not accept Brigham Young’s leadership and go off to Utah. She does not speak entirely positively about Brigham Young’s followers. I wonder what she would think now, knowing that the Utah Mormons are back in force. The site of the original Nauvoo temple, destroyed in 1847, has been for some years fenced off and open to pilgrims from Utah. Now the temple is about to be rebuilt across the street from where St. Mary’s Monastery, a Benedictine convent, has stood for years, and the monastery has become Mormon property. In downtown Nauvoo a small store sells stridently anti-Mormon literature; as the Utah church begins buying up property in Nauvoo, one wonders about the future of this little establishment.

I now spend even more time in Beardstown. This community was sampled both for *DARE* and for the Linguistic Atlas of the North Central States; an Illinois river town whose original inhabitants were probably mostly Southerners, it was, a century and a half ago, a port of entry for immigrants who arrived by steamboat to settle the United States. (I have only recently learned that my great-grandfather and great-grandmother, who came from Yorkshire, were among these.) It was home to a rich folk tradition—Barbara Myhre’s informant describes a “burgoo,” a public outdoor cooking event that was apparently a tradition in Illinois river towns, as I have since seen “burgoo” advertised as far upriver as Utica. [*DARE* Ed: See **burgoo** n 3 in Volume I.] Due to its strategic location on the river, Beardstown was an important place for farmers to sell grain and buy supplies during the mid-19th century, but this changed with the coming of the railroads and the decline in river traffic. So the time of dynamic growth ended, but for years the community remained stable. Then, during the early 1990s, a combination slaughterhouse and pork-packing plant was built in Beardstown. Because the labor is unpleasant and stressful, and wages are low by American standards, workers were imported from Mexico. Today the population of Beardstown may be as much as 50% Hispanic, a huge change from the town’s early history. There has been tension and violence, with one murder linked to ethnic tension and the burning of a bar

that catered to a Mexican clientele. Linguistically, a large Spanish-speaking population has brought new variety to Beardstown’s traditional North Midland and South Midland versions of English. It is impossible to predict what the results will be in a few generations, but for now the school system has had to adapt by adding bilingual and ESL classes to its curriculum.

While this was not one of the *DARE* communities I was assigned to, I have tried to use Beardstown as one of those cases where sociolinguists attempt to give something back to the community. Since I have spent the last several years trying to learn Spanish and prepare for a possible second career in ESL or bilingual education, I found myself, in 1997, visiting Beardstown as a student teacher of Spanish-speaking children. I don’t know how much I helped them, but they were very helpful with my Spanish. During the past few months I have returned to Beardstown as a volunteer for about forty minutes a week, helping a fourth-grade boy with reading in both English and Spanish. While my motives are not entirely altruistic—I hope through contact with this community to gain some fluency in Spanish—I do hope that I can also make a contribution. My willing and generous informants of more than thirty years ago gave me the start of a satisfying career exploring language diversity; this may be my way of saying a belated “thank you” to them. ♦

*Timothy C. Frazer teaches at Western Illinois University in Macomb, Illinois.*

\*\*\*\*\*

### ***DARE* in the News and on the Podium**

If your local newspaper carries Associated Press stories, you may well have seen an extensive article on *DARE* by AP writer Hillel Italie, which was featured in many papers late in May. The project was also featured in the *Christian Science Monitor* on April 17, and was mentioned (with respect to the distribution of *hoof-and-mouth disease* as opposed to *foot-and-mouth disease*) in *USA Today* in March.

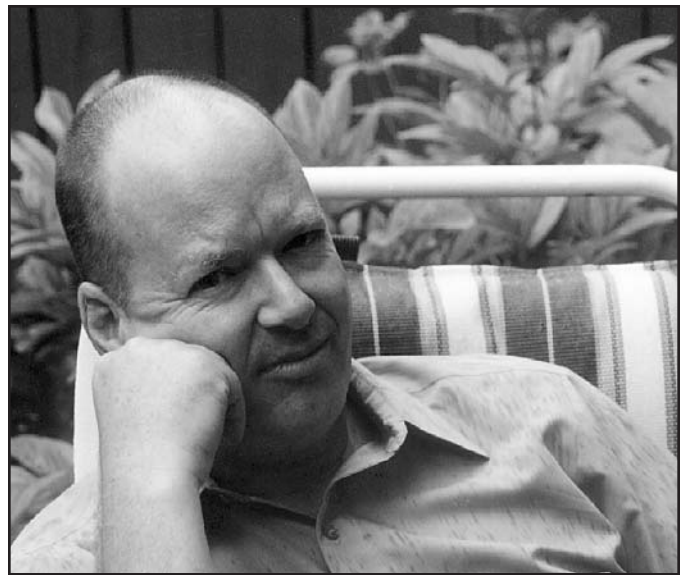
*DARE*’s Chief Editor, Joan Hall, presented the 16th annual “Peter Tamony Lecture on the American Language” in Columbia, Missouri, in March. In May, as outgoing president of the Dictionary Society of North America, she spoke on “A Life in Lexicography” at the Society’s 13th biennial meeting in Ann Arbor, Michigan. ♦

## Coming in Volume IV

<i>penco</i>	An orphan lamb. (NM, CO)
<i>pepper pot</i>	A soup of tripe, meat, vegetables, and dumplings, seasoned with black pepper. (Esp ePA)
<i>pharaoh (bug)</i>	A locust or cicada. (Chiefly sAppalachians)
<i>primost</i>	A type of cheese usu made by boiling whey or undrained curds. (Esp WI, MN)
<i>pully bone</i>	The wishbone. (Chiefly Sth, S Midl, TX)
<i>pumpknot</i>	A bump or swelling, esp one on the head caused by a blow. (S Midl)
<i>quile down</i>	To become quiet, settle down. (S Midl)
<i>ring-a-levio</i>	A team hiding or chasing game in which players who have been caught must remain in a designated area until released by a teammate. (Chiefly NYC)
<i>rock house</i>	A cave or shelter beneath an overhanging cliff. (Appalachians, Ozarks)
<i>round potato</i>	A white potato. (Esp C Atl)
<i>savagerous</i>	Fierce, violent, vigorous. (Esp Sth, S Midl)
<i>scale</i>	To skim (something) through the air; to skip (a flat stone) over a body of water. (Chiefly NEng, NY)

## In Memoriam

**D**ARE is saddened to report the death, on February 1, 2001, of former Editor Margaret Waterman. Margaret had assisted in the preparation of J. S. Kenyon's *Pronouncing Dictionary of American English* and had worked on the staff of the *Dictionary of Americanisms* in the 1940s, so when she came to *DARE* in 1973, she used that experience to help set up the editorial policies and procedures for this project. After retiring in 1980, she continued to live in Madison, Wisconsin. ♦



Leonard Zwilling, Bibliographer and General Editor

## Staff Member Profile

*In this continuing series, David Simon interviews Leonard Zwilling, DARE's Bibliographer and one of the General Editors.*

**Q:** How did you come to work on the *Dictionary*?

**A:** In 1985 I received my Library Science degree and was looking for a job as an academic librarian. In early January of '86 I was talking with the head of the cataloging department at Memorial Library, and she mentioned that her friend Goldye Mohr, who had been the Bibliographer for *DARE* for many years, was planning to retire, and suggested that I go up and see her, which I did. Goldye, who was about 85 at the time and a rather formidable presence despite her diminutive stature, looked me up and down, asked me a few pointed questions, said that I'd do, and took me in to meet Fred Cassidy. I remember his saying that if Goldye thought I was OK, that was good enough for him, and he offered me the job then and there. He went on to say that as I had a Ph.D. and the position was only half time, I likely wouldn't stay. So he offered me an additional half-time editorship which would begin in six months, if everything worked out right. I accepted, and I've been here ever since.

**Q:** What are your responsibilities at *DARE*?

**A:** I'm still wearing two hats, those of Bibliographer and General Editor, although editorial work now takes most of my time. As Bibliographer, I make a bibliographic record and short-title for every source, whether printed or "electronic" (web sites, for example), cited in the

*Dictionary*. In addition, I also oversee the work of the “lookup person,” who verifies the accuracy of the citations we take from secondary sources. I will also have the responsibility of supervising the compilation of the final bibliography. As Editor, I draft “general,” that is, non-science, entries. With the bare-bones staff we’ve been reduced to, I’ve found myself in the position of essentially being the gatekeeper over what will make up approximately two-thirds of the entries, with my decisions subject to the vigilant scrutiny of the Review Editor and Chief Editor, who will amend and improve (and sometimes reprove).

**Q:** What aspects of your background have been the most helpful to you in your work on the *Dictionary*?

**A:** Apart from my degree in Library Science, it’s my background in language study that’s proven most helpful in my work as Editor. My own specialty is in the languages of South and Inner Asia, especially Sanskrit, Tibetan, and Mongolian. Many other Editors who have worked on this project have had similar backgrounds; we have, or have had, Classicists, Germanicists, Slavists, Dravidologists, Indo-Europeanists, and doubtless other “-ists” which escape me at the moment. In fact, I think Joan Hall is the only member of the staff whose expertise is specifically in American speech. However, it’s worth noting that while a background in language studies may be a necessary condition for successful editorial work, it is not in itself a sufficient one. What is required is that intangible quality the Germans call *Sprachgefühl*, a sensitivity or feeling for language, in our case, the American language. Even with a formidable linguistic background, if one is “tone-deaf” to the kind of material *DARE* treats, one is not going to be a successful Editor. It’s a great mistake to think (as some have suggested over the years) that all that’s needed to speed things along is to go out and dragoon a gang of near-Ph.D.’s, put them through a crash course in how to edit, and set them loose.

**Q:** Why do you think the *Dictionary of American Regional English* is special?

**A:** Quite obviously it’s the fact that a dictionary of this kind and scope, which had never been done before, will almost certainly never be done again. A project like *DARE* is just too expensive and too open-ended in terms of the time necessary for completion to recommend itself to the bean-counters who seem to have taken over the world. When you

think about it, the fact that *DARE* has survived and is now in the home stretch is nothing short of a miracle and a tribute to those who’ve supported us over the years.

**Q:** What would be the most surprising aspect of your work to someone not familiar with lexicography?

**A:** I’d have to say the sheer amount of brain-work involved. What we’re doing at *DARE* is something quite different from what’s usually done in the commercial dictionary world in that we are not simply tinkering with an already published text but writing a historical dictionary from scratch. This often means dealing with material for which there may be no guidance at all provided by existing dictionaries. To assemble a mass of quotes, sort through them, distinguish differences in meaning and usage, establish their origins and history, write adequate definitions, and make a judicious selection of illustrative citations can sometimes involve some mighty heavy lifting. That the words and phrases which are our stock in trade can be expressive, allusive (and elusive), ironic, and symbolic makes things much more difficult than if we were only dealing with the standard vocabulary. There are those who’ve always thought that if only *DARE* had the right software or hardware we’d surely finish sooner. But the long and the short of it is that one can’t speed up the time it takes to think through everything that’s involved in turning out an entry. And as A. E. Housman observed, “Thinking is hard work.”

**Q:** What are some of your interests away from *DARE*?

**A:** I like to play the piano and organ. (I have a Hammond Model A with a Leslie box.) For some years, one of my colleagues and I have been getting together every week or so to read through some of the more obscure 18th-century flute-and-keyboard repertoire, which is great fun. I’ve also kept my hand in as an Asianist, and with my regular collaborator I’ve cranked out a few articles in recent years on sex and gender in ancient India. In fact, I have a book coming out in August, *Peacock in the Poison Grove*, which is a translation with commentary of two 12th-century Tibetan poems. I hope everyone who reads this interview will go out and buy a copy and make me rich. ♦



## Notes and Quotes

Here are a few selections from our recent correspondence file. We always enjoy hearing from you.

"On behalf of my Humanities 495 students, I want to thank you for making our visit to the DARE facilities both enjoyable and informative. Although we'd skimmed the three dictionaries and studied the materials you sent, we were surprised by the humble surroundings in which those amazing volumes are compiled! We were honored—and delighted—that you and your colleagues were so willing to take time out of your routines to acquaint us with your respective areas of responsibility. . . . What a learning experience for us all!"

Capt. Kathleen Binns  
U.S. Air Force Academy, Colorado

"Thank you for your prompt, enlightening response [regarding the word *stroobly*]." [DARE Ed: Ms. Schreiber's fifth-grade class had come across the word while reading *My Side of the Mountain*, by Jean George. It's a Pennsylvania German term, also spelled *strubbly*, meaning "shaggy, untidy, unkempt."]

Julia Schreiber  
Huntington, West Virginia

"I love reading about DARE. I first heard about it about twelve years ago, in a folklore class at the U. of Pennsylvania, and someday I hope to own all the volumes. Great work you're all doing. And I love that you have a web site. (I sent the URL to my mother, who knows a lot more colloquialisms than I do, and adores words in general.)"

Peggy Irish

## DARE Awarded NEH Grant

The National Endowment for the Humanities recently awarded DARE another two-year grant, with both outright and matching funds.

We were gratified to receive copies of the evaluations by the anonymous reviewers, which included such comments as this one: "It is not surprising that the first three volumes have become an indispensable reference tool for anyone interested in the English language *per se*. What makes DARE even more remarkable and useful is that a variety of users whose research interests are not primarily language are finding DARE a valuable resource." ♦

## Ask a Fieldworker

Several of our Fieldworkers are poised and ready to answer your questions about their experiences "in the field." Send your queries to the DARE office and we'll print the responses in a later Newsletter.

A reader asks, "What was the hardest part of living in a Word Wagon?"

### August Rubrecht answers:

For me, the hardest part was separation from colleagues and from family and friends.

On every other job I've ever held—whether cleaning chicken houses, pumping gas, clearing land, digging graves, flipping burgers, or teaching English—I've been able to get together with co-workers during breaks and after work to gripe and brag. We would vent our frustrations so we could put up with the job, and we would trade ideas that made the work go better. We Word Wagoneers could never do that, because we worked alone, hundreds of miles apart. We couldn't even call each other on the phone, and the only feasible way to correspond by mail was to route letters through the DARE office in Madison. Sure, we could phone the home office; we depended on such calls for help with specific problems. However, though staff members were on the same team, and though some had insights and sympathies born of fieldwork experience, it was not appropriate for us to spend expensive long-distance minutes calling just to talk shop and solicit a verbal pat on the back—of either praise or sympathy.

(Readers can imagine, then, how eagerly we former Fieldworkers read each other's comments in the DARE Newsletter. The only other Fieldworker I had a chance to trade stories with when we checked our Word Wagons back in was Patt VanDyke, and there wasn't time to trade nearly enough of them. We are satisfying a long-pent-up need.)

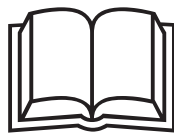
Sometimes I did solicit such pats from family members. I would call them on the phone to chat and tell them where they could send me letters by general delivery. I also saw relatives in person a few times in the first half of my fieldwork year. On the way to my first DARE interview in early September, I passed through my home territory to pick up some belongings and share with my ailing grandmother what we both knew was our final good-bye. In late October I attended her funeral. In late December I attended my sister's wedding just across the Texas line from where I was working in

western Louisiana, and a few weeks later I visited for a few hours with two cousins who were in training at Ft. Polk. These occasions helped me keep connected, but, hurried and harried as some of them were, they could not substitute for the relaxed visits during Christmas vacations and spring breaks I had enjoyed during college and graduate school.

Although I made many new friends among informants and other residents of *DARE* communities, these friendships never had time to develop much depth. Just about the time we got to know each other well enough to begin satisfying my craving for real companionship, not just “getting to know you,” I would finish the questionnaire and move on to the next community, to start getting to know other people. By the time I finished all the questionnaires in Louisiana, I was pretty lonely. I phoned Jim Hartman, *DARE* fieldwork coordinator, and asked permission to take a couple of days off en route to my next assignment in Delaware to visit an old college friend in Memphis. We had kept in contact for the three years since graduation. Jim said, “If you’ll do a questionnaire in Memphis, you can stay a week.” So I did. The visiting was splendid. We talked and talked and talked, saying the things old friends can say that new ones can’t. It was not enough.

Another old college friend was teaching at the University of Tennessee in Martin. Before the week was up, I called Jim again and asked, “Do you have a questionnaire for me to do in northwestern Tennessee?” He said yes. So I spent another week visiting with this friend and his wife, and that weekend the friend from Memphis came up and we all had a party. I went on to Delaware much refreshed, then finished up the summer in upstate New York.

All this time, I kept in touch by phone and mail with the friend in Memphis, recalling fondly how much I had enjoyed our long talks. After my year of fieldwork was done, I went back to Memphis and married her. ♦



## Funding Update

*Continued from page 1*

It is hard to believe that a full year has passed since Professor Cassidy’s death; his presence is still felt daily at *DARE*. He would be thrilled to know that the work on Volume IV is moving steadily forward. I also know that Fred would be very pleased that a Frederic G. Cassidy *DARE* Fund has been set up to benefit the *Dictionary*. He was acutely aware of the funds that were needed to complete his professional passion. To date, more than \$54,000 has been donated to this Fund, and I thank each of you who has contributed in his honor.

It is my goal to see that at least \$100,000 is pledged to the Frederic G. Cassidy *DARE* Fund, an amount that will enable us to “adopt” a letter in Fred’s honor—perhaps D for *DARE* or J for his native country of Jamaica. Professor Cassidy and I talked last year about the “Adopt a Letter” program, and he felt it was a creative way to help complete his work. It is only fitting that a letter be adopted in his honor.

You can contribute to the Frederic G. Cassidy *DARE* Fund in a number of ways. One easy way is to fill out the form at the bottom of this column. Checks may be made out to the Frederic G. Cassidy *DARE* Fund and mailed to the address on the coupon.

I am aware that some of you may want to make a gift of stock or a deferred gift. Please call me at (608) 263-5607 so we can discuss the easiest way to make that kind of contribution. Thank you for honoring Fred with your gifts. Your determination and

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_  
 State \_\_\_\_\_ Zip \_\_\_\_\_  
 Please use this gift to support the Frederic G. Cassidy  
*DARE* Fund.  
 My/Our contribution of \$\_\_\_\_\_ is enclosed.  
 Please charge my/our gift of \$\_\_\_\_\_ to my:  
 MasterCard  Visa  
 Card no. \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Exp. \_\_\_\_\_  
 Cardholder name (please print) \_\_\_\_\_  
 Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Please return this form to *DARE*, c/o  
 University of Wisconsin Foundation, 1848  
 University Avenue, P.O. Box 8860, Madison, WI  
 53708, Attn: David Simon

## DARE Newsletter

Postal Return Address:

Dictionary of American Regional English  
University of Wisconsin–Madison  
6125 Helen C. White Hall  
600 N. Park St., Madison WI 53706

(608) 263-3810

<http://polyglot.lss.wisc.edu/dare/dare.html>

Nonprofit Org. U.S. Postage PAID Permit No. 658 Madison, WI
---

---

### Where Are They Now?

*We're always delighted to hear from former DARE staffers. Drop us a line and let us know what you are doing!*

**D**ARE's first Proofreader, Lida Wagner, joined us early in 1982, just as we were learning what producing a dictionary involved. More than we knew! Lida's job required not just being sure that every word and symbol was reproduced exactly; it also required making sure that all the strange-looking codes (%b, %r, %L\, %F\2%N%R=%B, %m%i, etc.) were in the right places to produce the font and type-size changes, phonetic characters, hanging indents, etc., that make dictionary text unique. Before long, she was reading code as if it were her native language. Working closely with our Typist and Production Editor, she made sure that Volume I came out looking as it should.

Life after *DARE* for Lida included marriage to Jim Dersna and a move to the Chicago area, where she did market research and then became Vice-President for Research in a public relations firm. For now, daughters Julia and Leah—both budding ice skaters—keep her fully occupied. ♦

### DARE Staff Members

#### EDITORIAL STAFF

Roland L. Berns, Science Editor  
Craig M. Carver, Senior Editor, Editorial Computing  
Audrey R. Duckert, Adjunct Editor  
George H. Goebel, Review Editor  
Joan H. Hall, Chief Editor  
Sheila Y. Kolstad, Senior Science Editor  
Luanne von Schneidemesser, Senior Editor, Production  
Leonard Zwilling, General Editor, Bibliographer

#### PRODUCTION STAFF

Catherine R. Attig, Production Asst., Technical Typist  
Elizabeth Blake, Proofreader  
Elizabeth R. Gardner, Senior Proofreader

#### OFFICE MANAGER

Karen J. Krause

#### DIRECTOR OF DEVELOPMENT

David H. Simon

#### RESEARCH ASSISTANT

Conrad Treff