

AMES LAB INSIDER



TOM BARTON FLIES ACROSS A FROZEN LAKE IN HIS ICE BOAT

Tom Barton - Outside 109 Office & Lab

Talk about a winter wonderland! We've had one this year, but for many of us scraping ice-mosaic car windows, hooking up jumper cables and shoveling mountains of blinding white snow makes it decidedly difficult to appreciate the wonder in the wonderland. Not so for Tom Barton who finds challenge, excitement and just plain fun in winter activities such as ice-skating, ice sailing and skiing.

Asked what motivated him to seek proficiency in so many cold weather endeavors, Barton offered a straightforward explanation. "Iowa can be, in my opinion, a miserable place to live in the winter. Everybody complains about the weather. What I try to do, consciously and subconsciously I suspect, is find things to make one appreciate the winter."

Coming from south Texas (via Florida), Barton had little experience with snow when he first arrived in Ames. True to the image of the stereotypical scientist, he spent his first several years in Ames immersed in research, working seven days a week in his laboratory not even noticing the cold. "I got knocked out of that routine by my wife. She announced that she and our oldest son were going to take ice-skating lessons. I thought, those people are going to go off and learn how to ice-skate, and I guess they're going to do that for the rest of their lives, and I won't

know how and won't be included."

Wanting to be part of the group, Barton took ice-skating lessons with his family. In fact, he completed the beginner lessons and went on to take figure-skating lessons for two additional years. Eventually he was asked by a grad student to play hockey with the graduate student team, the Zambonis. Barton's reply, "No way!" Having seen only one hockey game in his life, and that in the Soviet Union, Barton admitted he knew nothing about the game. But the grad students were determined. "They cajoled me, and I succumbed. I went out to play hockey with the Zambonis and almost killed myself. I didn't know what I was doing; I was running around with this hockey stick and trying to play with figure skates!" Barton made it through that first harrowing game, bought some hockey skates and went on to play in a league with the Zambonis for the next several years.

Ice seems to hold a fascination for Barton growing up without the experience of seeing a frozen lake. A competitive "soft-water" sailor, he was thrilled at the prospect of ice sailing. Barton's introduction to the sport came in an unusual way. He and John Gerlock, a former colleague, saw a cigarette ad on television in which there was an ice boat. "I thought, that's wonderful; these people don't have to quit sailing when it gets cold!"

The ice boat idea captured their imaginations, and Barton and Gerlock set out to build their own, having no diagrams or plans to follow. "When we finally finished it we took it out to Little Wall Lake, and it would not move. It would not move at all!" After a couple exhausting afternoons spent pushing the ice boat around, they decided an impending blizzard was just what the boat needed and took it up to Little Wall to wait for the storm. "We stayed out there; the winds picked up, the snow came in and again we pushed the boat. It would move sometimes up to ten or fifteen feet before stopping. Disgusted, cold and angry, we burned it! Shortly thereafter we went out and bought a boat that really sailed!"

Barton estimates the fastest he has ever been in an ice boat is around eighty miles per hour. He notes that this seems quite fast because your sensation of speed is increased by the proximity between yourself and the surface over

which you are traveling. "In an ice boat you are lying down, about one foot above the ice, so it seems as though you are flying over the ice."

So, how do you stop an ice boat? "Just like a sailboat, you turn into the wind. You can stop it on a dime, right where you want." Barton elaborated that it becomes a matter of pride to be able to zing right up to where your partner is standing spraying ice everywhere and stopping exactly where you want to. It then also becomes a matter of greater pride for your partner to stand fast, giving the impression that he or she is not horrified by the possibility that you could fail in your attempted stop.

Ice sailing with one runner off the ice is one of Barton's favorite experiences. When one runner comes up, the boat actually slows down because the sail is at a tilt and is spilling, resulting in a sensation more like flying than sailing. "You can go sweeping around the lake much like a



One runner up, Barton sweeps the lake like a hawk.



Barton and former grad student, Bill Gouré, hit the slopes.

hawk. You really get an avian feeling.”

Ice sailing is not a sport that you can do every day. Nearly perfect conditions are needed. The ice must be smooth and relatively free of snow, and there has to be some wind. Barton commented that it's one of those activities you spend more time talking about than doing. “An ice boat is one of the few things you can willingly share. You may not want to share some of your possessions, but an ice boat—you're happy to give it up. Go ahead, please, take your turn!”

Exhilarating as it is, ice sailing does not lend itself to frequent participation. Skiing is one of the cold weather activities that makes Barton appreciate winter and around which most of his family's vacations are planned. They try to ski over the Christmas holidays and spring break. In March Barton and his family will be skiing in Switzerland.

Barton learned to ski as a result of being coaxed into it by some friends while in France in 1982. “I told them I didn't know how to ski, that I'd never even seen anybody ski. They told me I'd be good at it because I was a good

skater and it was the same thing. Well, that's a bag of crud! Let me tell you, I had trouble with it. On the day we went, an intermediate run was the only one that was open and it was all ice. I rolled down that mountain time after time after time! I got up the next morning and felt like a truck had run over me and then backed up to see what the problem was.” Barton made a promise to himself that he would never let that happen again. When he got home he learned how to ski.

Like many others in Iowa, Barton and his family learned to ski by going to Afton Alps in Minnesota and taking the beginner lessons. Barton claims he spent the next year trying to forget what they taught him. He explained that the lessons taught you how to snowplow or put your skis together in a v-shape. Straightening the skis out is what allows you to gain some speed going down a hill. “You'd kill yourself trying to snowplow on a steep, rugged hill. You should learn how to ski parallel skis right from the beginning and take your lumps, unless you plan on skiing bunny hills the rest of your life.”

Asked if he had any advice for beginners of new activities, Barton says that most people undertake them for the challenge. “For instance, if you decide to go skiing, it will be because you want to see if you can ski. You won't go with an absolute surety in your mind that you will be able to ski, but with some sense of trepidation.” Barton says this feeling is common when trying different activi-

ties or encountering new experiences in life. The catch is determining what is an acceptable level of mastery for you to enjoy participating in the activity. “You get to some point where you're really not even trying to get better. You're happy with your position; these are the slopes that you have fun skiing, this is the speed at which you enjoy sailing, etc.”

Most of Barton's recreational activities were taken up after he turned forty. He

disavows any natural athletic talent and claims he has never really mastered any of them. “I had some goals in each of the activities and do them because I like them.” Seeking the thrill of a challenge, Barton, a recently licensed private pilot, would like to try hang gliding next! □

Vera David is Missed

Colleagues and friends were saddened by the loss of Vera David who died of cancer on January 12 at the age of 62.



Vera David

David, former editor of *CHANGING SCENE*, was known to almost everyone at the Ames Laboratory.

David came to work in the Information Office in 1979 as an Information Specialist. For eight years until her retirement in February 1990, she was the Ames Lab Public Information Officer.

Born in Prague, Czechoslovakia, David left in March

1939 following the Nazi occupation. In September of that year, she emigrated with her parents to Sydney, Australia where she graduated with a bachelor's degree in chemistry from Sydney University. Married in London, David worked there as a biochemist for three years before coming to the United States in 1957. She received her master's degree in communications at the University of North Carolina in 1970. Moving to Ames in 1972, David worked in television for several years.

David liked writing about science. “I finally found my niche when I landed this job at the Laboratory,” she said during her retirement interview. “I have enjoyed working at the Lab very much.”

In March, 1990, David and her husband received the Human Relations Award from Iowa State University in recognition of their service to humanity.

David is survived by her husband, Herbert, one son, and three grandchildren. □

Chemistry That Works

As Valentine's Day approaches, people tend to think in pairs: hearts and cupids, candy and flowers, dinner and a movie. The concept of pairs can extend to couples we know who work at Ames Lab. In honor of Valentine's month, some of these couples are giving us a glimpse at the science of the heart and showing us a chemistry that works.



DIANE AND DAVID SANDERS met in graduate school at ISU, both students in physical chemistry. According to Diane, it was "friends at first sight." "We became close friends and that really helped our relationship. We got to know each other quite well before we started dating. Dave is well aware of my feelings and is a true friend. He's also cute; I guess I should say good looking!"

Diane is currently an Ames Lab postdoc working for Terry King. Dave, a student associate for Andrew DePristo, will soon complete his PhD program. Both Lab employees, Diane notes, "We sometimes meet for lunch, but more often I end up getting involved and working through my lunch hour."

Devoted owners of Fred, a lethargic, eighteen-pound cat fondly named after Fred Mertz from the old "I Love Lucy" television series, Diane and Dave also tend to nine birdfeeders in their backyard. Perhaps this is why Fred weighs eighteen pounds and seems so lethargic! In addition to caring for Fred and keeping him fed, Diane and Dave like the outdoors and often take walks in the woods where Dave hunts from time to time. They both enjoy crafts and work on them during cold winter evenings at home, Diane on a cross-stitch project and Dave building model ships and airplanes.

Asked how their personalities differ, Diane says there is one big contrast. "I work in a frenzy when I'm under pressure and will work to the point of exhaustion. Dave can only work for so long at a time. He needs regular breaks, and I believe he is more controlled because of that."

Diane and Dave are alike in that they both have a strong set of values and a similar set of priorities. Both have very close family ties and put their families above everything else. Perhaps the most important area in which they are alike is their agreement on what makes their relationship a successful and happy one. Diane spoke for them both, "The long period of being friends first was so important. It provided a very strong relationship to build a marriage on." ♥



HELEN AND WALTER STRUVE both love to ski which played a part in how they met. A former college friend of Helen's, who just happened to be the fiancée of Walt's roommate, asked Helen to go skiing one weekend. After returning from the trip, Helen's friend invited her back to the graduate student apartments for coffee. That was when Helen met Walt. Interestingly, they did not meet before that ski trip weekend although both lived in east coast towns that were rivals in the area high school football conference.

Helen and Walt are veteran Ames Lab employees, both starting here in 1975. Helen is a computer scientist, answering calls for help from her office in the Computer Garage. Walt is a senior chemist and group leader.

Asked their impressions after first meeting one another, Walt said, "I definitely wanted to find out more about Helen." Helen thoughtfully replied, "It was obvious to me that Walt was grand."

Helen and Walt's first dates alternated between fast-pitch community baseball in Boston and going to foreign movies. Today they often sail, ski, and attend movies and the symphony together.

Giving an admirable list of

attributes when asked what characteristics of Walt's she cherished most, Helen said, "Walt's very witty, sincere, and does not try to over-impress people. He has deep compassion for those in great stress or difficulty." Walt admires Helen's outgoing personality noting that she is more of a people person than he is. He is very impressed by her astuteness concerning current events which is beneficial to him as a school board member. No doubt assuring himself of a terrific valentine gift, Walt summed up his feelings concerning the characteristics he most admires about Helen, "Everything!"

Asked what makes their relationship a happy one, Walt wisely replied, "That's chemistry at a higher level than I can figure out. I really don't know the answer to that, but it will be twenty years in July." ♥



SHELLEY COLDIRON AND MARC PORTER, an energetic and work-directed couple, met in undergraduate school at Wright State University when Marc asked Shelley to work with him on writing an undergraduate National Science Foundation proposal. Asked if her interest in Marc was sparked at that time, Shelley admitted, "Well, I always was kind of eyeballing him and thinking, not bad!" Considering a list of possible

traits that attracted her to Marc such as personality, looks, sense of humor, brains, Shelley laughed and asserted, "All of the above! Marc is so outgoing and has such a bubbly personality, what can I say? Both being in science, we have the ability to communicate, too."

Shelley is presently an Iowa State graduate student working on her PhD in biomedical engineering. An Ames Lab student associate, she works at the Applied Science Center complex. Marc is an Ames Lab associate and ISU assistant professor of chemistry.

Shelley says she admires Marc because he is light-hearted, optimistic and has a good attitude about things. "He's such an accomplished person, but still so down-to-earth."

Because of a recent tonsillectomy, Marc was at Shelley's mercy in this interview. When questioned about the annoying little habits of her spouse, Shelley told all. "I always joke about Marc becoming the absent-minded professor, that some day I'll have to put tags on him to identify who he is so he can get back home. It's not annoying, just a humorous thing."

Becoming more serious, Shelley considered for a moment how she and Marc are alike. "We're both very work-oriented. No matter how much time we spend working, it's okay because we both like what we're doing. We also like the fact that our interests are so closely related. We participate together in such things as work, softball, golf, exercise

workouts, leisure reading and future dreams."

A February 14 anniversary date makes Shelley and Marc a true Valentine couple. Shelley says their wedding date wasn't planned with Valentine's Day in mind. They first looked at dates in March and then noticed that February 14 fell on a Saturday that particular year. "I joked with Marc about setting the valentine wedding date, telling him that way he'd have a harder time forgetting our anniversary!"

Shelley summed up the things that make their relationship a successful one. "We don't demand too much out of each other. We let each other be who we are and try not to criticize." ♥



CHRISTINE AND DANA FULLHART, both from Ames, met in junior high in their 7th grade science class, but didn't go out until they were in high school. "Our first date was a tennis date," said Chris. "We rode our bikes and met at Beyer Hall because we lived on separate sides of town."

Chris and Dana get to see a lot of people in their Ames Lab positions. She is a graphic designer for Graphic Communication Services. Dana is an electrician, seeing people in many locations, depending on where electrical service and

repairs are needed.

Noting that they both hung out with different crowds, Chris explained she and Dana didn't get to know each other very well until they ended up in band together, Chris playing the bass clarinet and Dana the trumpet. Three years of high school band gave Chris and Dana the chance to see if they were marching to the beat of the same drum. Obviously, they were, because their relationship continued long past high school. By the time they got married in 1984, they had gone together for ten years.

Asked what characteristics she most admired about Dana, Chris replied, "He has the same goals and interests that I do." Finding that an acceptable answer, Dana quickly interjected, "That's what I was going to say!" Chris continued, "He agrees with my views, and I know he loves me!"

Mentioning love led to talk about how Chris and Dana celebrate Valentine's day. "I get her roses and we go out to eat," Dana said. Chris was somewhat embarrassed, admitting that last year she gave Dana socks for Valentine's Day. Justifying her gift, Chris explained, "Well, he just happened to be complaining about socks that week!"

Both Chris and Dana agree that it was the long period of going together before getting married that contributed so much to their successful relationship. Dana thoughtfully commented, "We got through worse things during that period than anything we could come across now."

Regardless of what gifts Chris and Dana exchange this

year on St. Valentine's Day, they already have two very special and sweet little valentines, Andrew and Julia, ages four and six months. ♥



CONNIE AND MICHAEL VACLAV met in high school and had their first date a month after they graduated from Ames High. They went on to Iowa State and continued dating through college, although that wasn't as simple as it might sound. "I tried to date her when we first met," Michael said, "but she wouldn't go out with me. She had better taste than that." Connie objected, "It wasn't that I didn't want to go out with him. We were seniors, and I was very busy. I was involved with the yearbook and thought it would be better to put dating off until after graduation."

Connie and Michael find one of the advantages of both working at Ames Lab is the opportunity to meet each other's co-workers. Connie is a programmer analyst in the Computer Garage and Michael is an associate engineer in the Metals Development building.

Asked about what attracted them to one another, Connie laughed, "Ooh, tricky!" Both Connie and Michael seemed

CHEMISTRY / Continued on Page 7



1991/1992 Holiday Inn Government Identification stickers are available for Ames Lab employees in the Travel Office. Affix the sticker to a personal credit card to receive the government rate.

Graphic Communication Services saves many of the computer-generated forms and publications done for clients on computer disks. Unfortunately, the large number and size of files generated prohibits them from saving everything. If you would like to save an electronic copy of the work done for you, please let Graphics know. They will copy the file onto a floppy disk for you to keep.

Just a reminder that the Office of Information will be offering R&D reports from other laboratories as "free issue" throughout the month of February. Each week new documents are placed on the shelf just outside 201 Spedding Hall for your perusal. There are a few books still available. Please stop by and help yourself.



Joel Calhoun, program assistant in the Rare-earth Information Center since November 1989, has been called to active duty in the Persian Gulf. Calhoun, a radar specialist, left on January 17th and is expected to serve on a Navy supply ship. He was on active duty from 1975-80 and has been in the Naval reserves since 1981.

Please let us know about other employees that have been called to serve. We will publish addresses if we have them.

The scientific glassware washing facility has been refurbished and is open for business. Call the Storeroom at 4-6082 to make arrangements to have your glassware picked up, cleaned and returned to your lab.

COMPUTER SECURITY

We continue the discussion of the Information Systems security environment. According to Data Processing Management Association there are three major perpetrators of computer crime: 81% are current employees, 13% outsiders and 6% former

employees.

Four key words summarize the protection of our information and data: prevent, detect, minimize and recover.

All computer users should strive to have procedures in place to PREVENT accidental, malicious and natural acts and design limitations that cause damage, destruction, disclo-

sure, or denial of service.

Since there are no set procedures that are perfect, we should have a means to DETECT if something has happened to our data computing resources. Despite our best efforts, some unwanted event will occur. We should have available ways to MINIMIZE the effect of the un-

wanted event. How many of us have, by human error, formatted a disk containing good data or programs? We must have a way to RECOVER from such an event. As users of computing devices purchased with Federal dollars, we share certain responsibilities for information source protection. □

◇ CHEMISTRY / Continued from Page 5

to have a hard time pinpointing the exact source of the attraction, but it obviously existed because Michael made the call for that first date. "It almost didn't happen," he confided. "At the time, I was working for a local hardware store and had just finished a long day that was topped off by having to assemble a bizarre birdhouse. It was a big martin house."

Crucial to this tale is the fact that Connie's maiden name was Martin and at that time her family operated the Ames Babysitting Service from their home. When Michael called Connie's home that evening her mother answered, "Ames Babysitting Service." Michael offered his apologies for dialing the wrong number and hung up. The next time he called, Connie's father answered saying, "Martin house." "I just about quoted him the price on the birdhouse I put together that afternoon!" Michael finally got to talk to Connie and asked her to go out and look at the stars. "He's an amateur astronomer and it was a clear night," Connie quickly clarified.

Commenting on characteristics admired in his spouse,

Michael says, "She's level-headed enough to keep us both on a straight track."

Connie says Michael cooks and helps out around the house.

Connie and Michael both enjoy reading and dining out. She bowls in a league for women and he sings with the Ametones. They recently added square dancing to their leisure activities.

Asked what they thought made their marriage work, Michael replied, "Work. Seriously, we work at it. There's a lot of effort involved. It's an institution I heartily recommend, by the way." ♥



SUSANNAH SCOTT AND EARL SMITH met as undergraduates at the University of Alberta in Canada where they had many science classes together. According to Earl, it only took about two weeks for the interest to develop and two months before they were dating seriously.

Susannah confessed that she was attracted to Earl

because he was very self-possessed. "It seemed like he knew exactly what he was doing, and I was floundering at the time. Also, he knows everybody and it's nice to be around someone like that." Earl targeted in on why he is attracted to Susannah, "She's smart, that's why!"

Both in graduate programs at Iowa State, Susannah and Earl are accustomed to the rigor of graduate student life which offers little spare time. Working as student associates at the Ames Lab gives them the opportunity to share lunch hours together from time to time as well as pursue research interests. Susannah works for James Espenson and Earl for Marc Porter.

Susannah and Earl dated for about two and a half years before they were married. Susannah recalled, "We wanted to get married right away, but my parents convinced us to wait." "They bribed us," Earl corrected her. "They told us if we waited a year they would give us a trip anywhere in the world! We went to England as it turned out, waiting to get married until just after graduation."

Susannah says Earl is a generous person. He makes the same comment about her noting, "We're very similar people." Susannah does feel

she is the more serious of the two, saying Earl is the one who likes to have fun and experiment with new things. Interestingly, Earl claims that Susannah still has more outside activities than he does.

Both avid readers, but not of the same things, Earl says, "We sometimes try to force books on each other, usually getting a response like, 'Okay, I'll get to that sometime.' Besides reading, we like traveling back to Canada for our holidays and enjoy dining out."

In this seemingly perfect relationship, there is one thing that causes Susannah some minor annoyance. "Earl eats chocolate cake for breakfast, and it drives me crazy! How can you eat that at eight o'clock in the morning?"

Commenting on what makes their relationship a special and happy one, Earl said, "Talking. Susannah is the person I can communicate best with in the whole world!" ♥

Charming people, these Ames Lab couples seem to have balanced the equation and come up with a chemistry that works for happiness, evidence that certain double bonds share something other than a pair of electrons. Happy Valentine's Day! □

Winter Biking Enthusiasts

A few hardy winter biking enthusiasts can often be seen pedaling to work, straining against heavy winds, battling cold temperatures and drifting snow.

"Riding in the winter isn't that much different than riding during the summer," says Mel Tschetter. "The bike paths I use are routinely plowed, but I have been known to push my bike home when the snow was too deep. I get my exercise riding, and it saves me the time it would take to go to the gym. Besides, it saves energy." He began riding to work in 1973 during the gas shortage. Tschetter is prepared for unexpected storms keeping a complete rain suit both at work and at home. He doesn't have a parking sticker and drives his car to work less than five times a year, and then only when he needs to run special errands.

Twenty-seven years ago Bob Staggs forced himself to exercise by riding the 2 1/4 miles to work every day. He doesn't mind riding in cold weather and has ridden in temperatures of 20 degrees below zero, but he doesn't like to ride unless he has traction. "I try very hard not to be a hazard," he says. "I stay on the bike paths and sidewalks in bad conditions." He's calculated that he saves about half a gallon of gas per day by riding his bike.

Incorporating energy conservation into his lifestyle, Bernard Gerstein has been riding his bike to work for over thirty-two years. "I ride



Some Ames Lab winter biking enthusiasts are left to right: Mel Tschetter, Bob Staggs, Hal Sailsbury, Bernard Gerstein, and John McClelland.

a bike to save energy and for convenience. When I go to a meeting on campus I park beside the building." Two or three times a year when there is heavy snow and the plows haven't been out, Gerstein skis to work.

John McClelland has biked to work since he came to Ames Lab in 1967. "I prefer a 3-speed bike," says McClelland. "The gears are enclosed in a hub making it more practical and reliable than other bikes that have the gears exposed to the weather."

Hal Sailsbury simply enjoys riding. It relaxes him and helps him let off steam.

Iowa's winter weather doesn't deter these avid bikers from getting their exercise or reaching their destination. □

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