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PROVIDING EDUCTION, TRAINING, & SERVICE TO STUDENTS & THE INDUSTRY. **Digest** Dedication



HOWARD BONNEMANN

By Robyn Kranz

GREBSLARAJ. Solve this riddle! For more clues you will have to continue reading!

Howard, a native of Brookings, has been married to Diana for 12 1/2 years. They have a five year old son, Eli, and another baby on the way. In his spare time, he enjoys reading to his son and eating vanilla ice cream. A dream vacation for Howard would include a bicycle tour through the Rhine River Valley. Besides bicycling, he enjoys volleyball.

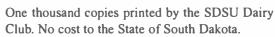
Talking to the students is what Howard considers the most enjoyable aspect of his job. His future plans for the plant include remaining in the black, applying classroom knowledge, and remodeling the facilities.

I was among his first Field Experience students and have gained a wealth of information from him, both as a student and friend. He brings much industry experience to this University setting, which is priceless. Many people would agree that Howard is a walking encyclopedia!!

This year's Digest is dedicated to Howard Bonnemann. He is the person who supports the Dairy Club's cheese box fundraiser every year. Not only does he make the cheese, but he provides the dairy plant for members to cut, package and assemble blocks of cheese for the gift boxes. He has always been there for the club members.

Have you solved the riddle! Need some more clues? Well, it is white, it has an intense flavor and odor, and Howard enjoys eating this food. If you know the name of his favorite cheese, then you know the answer. JARLSBERG!!







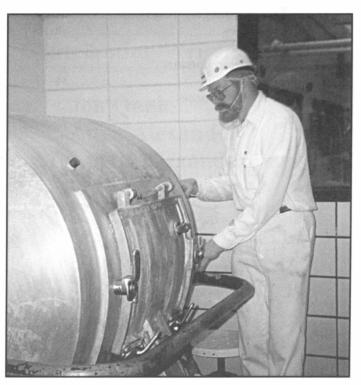




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Editor's Comments





Well, the 1999 Dairy Digest is finished. After innumerable hours of planning, writing, and picture-taking, I am proud to present it to you. I finally realized after three years of being an assistant editor; being editor is not the glory job!! From this position, I have learned better organization, communication, and most of all, procrastination skills. Beginning the Digest early in the year and writing stories soon after the event was my goal. However, we were still writing stories a few days prior to the publishing date. From this experience I have decided that I will never procrastinate again!

I want to thank my assistant editors: Robyn, Kari, Ann and Dr. Henning for their efforts to make the Digest a success and my sister, Catherine, for assisting with typing stories. Also, I thank the advertisers for making the Digest possible. I hope you enjoy it!!!!

Cari Leuthold

1999 Dairy Digest Staff

Editor:

Contributing Writers:

Assistant Editors:

Cari Leuthold

Robyn Kranz Ann Harvey Kari Kirschenman Jon Qual Anna Alexander Curtis Alexander Wade Gustafson Renae Jorgens Stacy Mueller Melissa Pinkert Melissa Post Janelle Yaggie Darin Zoellner

Words of Wisdom from the Dean



2000

Dr. Fred Cholick Making a difference! It is more than the new motto of the SDSU College of Agriculture and Biological Sciences. It is the basic land grant philosophy that makes us a partner with South Dakotans. It means that we believe in the people of this state and are willing to work hard for their success.

The SDSU Dairy Science Department is a leading example of the land-grant university partnership. The research, extension and teaching efforts of the Dairy Science Department are focused on advancing the global future of South Dakota.

SDSU is one of only three universities in the United States that offers both Production Dairy and Dairy Manufacturing majors, and is a nationally recognized leader in dairy Our national education. means that reputation employers actively recruit SDSU dairy graduates.

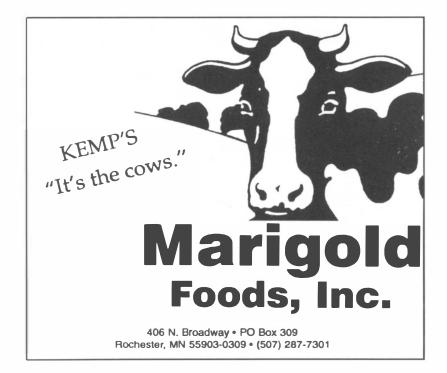
The SDSU Dairy Science Department maintains a 100 percent placement rate, indicating that all students have jobs or go on for additional education upon graduation.

Today, South Dakota's dairy industry is at the crossroads. We are working hard to ensure that the industry will be in the future. strong Therefore, we plan to renovate the SDSU Dairy Plant by installing current processing dairy technology. We believe that students must have hands-on learning opportunities with cutting edge technology it they are to be the leaders of the futures dairy industry.

We will maintain our tradition of providing the best dairy education available. Our faculty will use creativity, innovation, and teamwork to address the challenges and opportunities of tomorrow. It is our goal to make a difference in the dairy industry.

We must remember that the SDSU Dairy Science "our" Department is department. It is the sum total of our contributions. our efforts, our strengths, and our goals. The department becomes what we as individuals choose to make it. We must take ownership and pride in our efforts, and understand that our labor lays the foundation for the future of our state.

Let us know how we are doing, and how we can meet your needs in the future.



0

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Denise Malo, an SDSU senior double majoring in agronomy and environmental management, started working in the Plant Science Lab as a college freshman. Her undergraduate research project focused on the use of remote sensing for site-specific management.

www.abs.sdstate.edu Ag Hall 135 / SDSU / Brookings, SD 57007 / (605) 688-4148 .

Notes from the Advisor's Desk

David Henning

2000=

This was another good year for the Dairy Club. We have a group of active hard-working getting students involved with the industry, the faculty and their peers. All activities can be training for these students. 1 particularly note that by the junior and senior year, the students have friends and contacts at other Midwest universities and within the dairy industry. These contacts are the start of

networking, which should be useful for a lifetime of learning.

The cheesebox sales were more profitable this year. The cost of cheese was lower, but savings in having our own UPS account were significant. The efforts made by the club were concentrated during a month period and several members spent a lot of time making sure that orders were shipped on time. The club appreciates the business of alumni and friends for this major source of funds for the club. Please allow them to make corrections if you are not completely happy with the cheeseboxes that you ordered. This is an education in quality control.

The new club officers are off to a good start. The Midwest American Dairy Science Association Student Activity Division meeting in Madison, Wisconsin was fun for those attending. Our Quiz Bowl teams



L - R: D. Henning, H. Bonnemann, and A. Hippen. be made valiant attempts and were better prepared for this year's contests.

Arnold Hippen

Having completed my second year as a Dairy Club faculty advisor, 1 would like to reemphasize my notes from last year. The SDSU Dairy Club defines the spirit of campus what а student organization should strive for. The of cooperation degree and enthusiasm with which club activities are conducted are unparalleled by other campus organizations. Once again, I have had the pleasure of accompanying several members to the World Dairy Expo in Madison, WI. In route, we joined the Posilac Dairy Tour and visited two of SE Minnesota's most progressive dairy producers. Many new ideas were observed, hence the students will use this information both in the classroom and on the farm. World Dairy Expo, provided club members the opportunity to attend production/ management seminars, meet industry representatives from all phases of the dairy industry, evaluate the finest dairy cattle in the world, and enjoy "fair food" along with good companionship. For students who have not visited World Dairy Expo, make plans to be involved in one or two of the Expo trips during your time at SDSU. It allows experience vou to the glamorous side of the dairy industry.

Howard Bonnemann

The Dairy Club has had an interesting year. Although, there are fewer students within the department to draw membership from, those students who participated in the club's events have not been disappointed.

The club had a good year selling cheeseboxes, as well as many social activities. A small group of dedicated workers again made the cheesebox fundraiser a success for the whole club.

Fundraisers, such as cheeseboxes, made trips possible for those who wanted to attend. A few club members attended the World Dairy Expo in Wisconsin during September and many attended the ADSA-SAD regional meeting also held in Madison Wisconsin, in February. Also, many club members participated in Little International.

The group is filled with energy and enthusiasm, and will continue to demonstrate their abilities as they prepare to move on to careers within the dairy industry.



Dairy Science Highlights





Dr. John Parsons

Students graduating from the Science Dairy Department continue to be in great demand by the dairy industry. Companies from all over the US are coming to the SDSU campus to recruit our graduates at salaries that now average \$34,000. Most of these companies have implemented cooperative education programs for summer work which gives students hands the on experience as well as excellent summer salaries. Our challenge continues to be the recruitment of new students into the dairy program.

Dr. Rajiv Dave joined the faculty July 1, 1999 as Assistant Professor of Microbiology. He earned his BS in '86 and MS in '91 in Dairy Technology and Dairy Microbiology in Anand, India, and his Ph.D. in '98 in Food Microbiology from Victoria University, Melbourne, Australia. He was on a post-doc position at Utah State University for one year prior to coming to SDSU.

Ryan Pietz accepted the Dairy Plant Superintendent position on a part-time basis while he completed his BS degree. He is now full-time in the position and helping us plan for a remodeling project.

Dr. Kim Cassel has accepted the position of Program Leader for Agriculture, National Resources, and Field Operations in the Cooperative Extension Service. Mr. Dave Weinand filled in on a temporary one year appointment and currently we are recruiting for this faculty position. Dr. Sharon Franklin's position in Dairy Production has been advertised and the faculty is currently evaluating three excellent candidates for this position in teaching and research.

Helen Rollag retired July 1, 1999 after 17 ½ years in the Dairy Science Department. Margaret Jensen from Volga, SD, accepted the position as word processor on August 17, 1999. She has worked on campus for the past 14 years.

The Dairy Products Judging Team, coached by Dr. Bob Baer, placed 2nd in all products at the Regional Contest in Glenview, Illinois, and 3rd place at the Contest National held in Chicago. Team members were Beth Larson, Sheri Moeller, and Jared Janke. The Dairy Cattle Judging Team under the direction of Darryl Rennich competed in the Regional Contest at Viroqua, Wisconsin, and the National Contest in Madison, Wisconsin. Team members were Wade Gustafson and Curtis Alexander.

The Dairy Science faculty continues to be very active in professional activities. At the

American Dairy Science Association meeting in Memphis, Tennessee, June 20-23, 1999, a total of 13 papers/posters were presented by the faculty and the graduate students. Dr. Vikram Mistry completed the 2nd printing of the 3rd edition of his book, "Cheese and Fermented Milk Foods". Dr. Dave Schingoethe was elected Vice President of ADSA and will move up to President in July 2000! Dr. Dave Henning is currently serving as Program Chair for the Dairy Foods Section and Dr. Bob Baer was elected Professional Member of the Dairy Foods Council.

This spring we contacted the engineering firm of W.M. Sprinkman Corp. to survey the Plant Dairy and make recommendations for updating the dairy equipment. You can imagine my surprise when I received a phone call from John Linneman. а 1973 graduate in Dairy Manufacturing, that he was the Dairy Engineer assigned to this project. John has made two trips to survey the plant and will make his recommendation this spring. We will probably contact another engineering firm to make recommendations on the expansion of the Dairy Sales Bar and added storage space for packaging materials, etc. Once we have the plans in place we will begin a fund raising drive to raise the needed money and/or plant equipment. We are confident that our alumni and the dairy industry will support this project.

Professors of Dairy Science

Bob Baer

2000

Dr. Bob Baer is a Professor of Dairy Science at South Dakota State University (SDSU). He received his Ph.D. from the University of Georgia in 1982 and has been at SDSU since. His teaching responsibilities include courses in dairy chemistry, dairy product processing and dairy product evaluation. Dr. Baer coaches the SDSU Dairy Products Judging Team. He has an active dairy research program, and currently has several ongoing Minnesota-South Dakota Dairy Food Research Center projects. Research interests include effects of bovine somatotropin on milk products, production of dairy products with enhanced levels of beneficial fatty acids, utilization of emulsifiers in low fat and non-fat ice cream, production of cheddar cheese from condensed



milk, and rapid methods to analyze dairy products. He has written over 80 scientific publications and is a member of the American Dairy Science Association.



Rajiv Dave

Rajiv Dave was born in India and received his Bachelor's and Master's degree from the Dairy Science College in India. After successfully completing his Bachelor's degree in Dairy Manufacturing, he joined his alma mater as a Senior Research Assistant in 1987. In 1988, he enrolled in a Master's program as an In-service candidate on part-time basis. Dr. Dave successfully completed the degree in 1991 in Dairy Microbiology. He then moved to the ice cream industry as a Deputy Manager (QA/ R & D) in 1993. In 1994, he was offered skill immigration for Australia and he immigrated to Australia where he joined Victoria University for a Ph.D. program. In 1998, after

successfully completing his Ph.D. program, he was offered a post-doctoral position at Utah State University. After his one year of post-doctoral research in the US, he joined South Dakota State University on July 1, 1999, as Assistant Professor of Dairy Manufacturing. He is teaching food microbiology, Dairy Processing II, and dairy microbiology courses to the undergraduate students. He is also has graduate faculty status and at present, he is advising one student for graduate studies.

Gene Stegeman

Gene Stegeman joined the Dairy Science Department, January, 1995, as the dairy farm supervisor/instructor. This was a familiar place since he graduated in 1989 with a BS in Dairy Science and in 1991 with an MS in Dairy Science.

Gene is responsible for the management of the dairy research farm, teaching undergraduate students, and conducting short courses for producers in conjunction with the SDSU Extension Service. His teaching duties include classes in dairy cattle evaluation, artificial insemination, and field experience. Gene also conducts short classes on milking management, and in the future, hoof care for area dairy producers. Gene and his wife Donna, also an alumni of the Dairy Science Department, have a three-year-old son, Kyle.





Professors of Dairy Science



Howard H. Bonnemann

Howard Bonnemann is the dairy plant manager and instructor and has been at SDSU since fall of 1997. He received a MS in Dairy Science and two BS degrees in Chemistry and Dairy Manufacturing from South Dakota State University. Currently, he instructs undergraduate students about the general procedures and processes in the manufacturing of quality dairy products. He trains students in proper operational procedures in the dairy plant and advises the SDSU Dairy Club. His research includes assisting in procurement of materials and scheduling of plant facilities for utilization by graduate students for their research projects. Presently, Howard oversees all sales and production activities associated with the plant. He provides over 60 tours per



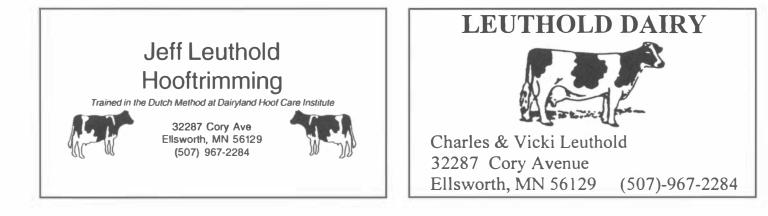
year to public school groups, private citizens, community organizations and university classes as a public relations campaign. Annually, he conducts the Little International, and the Regional and State FFA Dairy Foods Contests.



David R. Henning

David Henning is the Alfred Chair of Cheese Chemistry and Technology and also an Associate Professor of Dairy Science. He is a graduate of the University of Illinois with a BS in Dairy Technology. He earned his Ph.D. in Microbiology at Oregon State University. Prior to joining the Dairy Science Department in 1990 he had worked as Director of Laboratories at Moseley Laboratories in Indianapolis, IN, and at Kraft Foods in Glenview, IL, for a total of 22 years. Dr. Henning has taught food microbiology, dairy microbiology, advanced dairy microbiology, cultured products in dairy products processing, laboratory techniques in dairy science, and a portion of microbial systems.

His research interests are food safety and cultured dairy products. This year, Dr. Henning is the chairman of the Dairy Foods Division of the American Dairy Science Association and is the chairperson of the Dairy Foods Program for the annual meeting in Baltimore in July.



Professors of Dairy Science



2000

Vikram Mistry

Vikram Mistry is a Professor of Dairy Science. He has been at SDSU since fall of 1986 when he joined the faculty as Assistant Professor. He received his MS and Ph.D. from Cornell University in Food Science and his BS in Dairy Technology form the Gujarat Agricultural University in India. He teaches Technical Control of Dairy Products I, and the concentrated milks, dried milks, and cheese sections of the dairy product processing courses. His research interests include product processing technology, especially cheese.

David J. Schingoethe

Dr. Schingoethe teaches courses at both ends of the spectrum. Namely, he teaches the production portion of introduction to dairy science, most semesters; physiology of lactation and rumenology. All of these courses stimulate me and, hopefully, the students, too. As for research, he conducts dairy cattle nutrition research. Currently, it involves modifying the composition of milk fat by evaluating various corn products and fiber-digesting enzymes in dairy cattle diets. Hence, milk may be healthier and a more marketable product. Some of our scholarly graduate students play an important role in conducting this research. His other activities include a recent stint as editor for the Journal of dairy Science, and Vice President of the American Dairy Science Association. On the



lighter side of life, he enjoys boating; music; traveling; and spending time with his wife (Darlene), their two daughters and their husbands, and their grandchildren.



Arnold R. Hippen

Dr. Hippen's current appointment at South Dakota State University is the David H. Henry Sustained Professorship. He teaches ungraduate and graduate students, provides technical support for South Dakota dairy producers, and conducts research on dairy farm management and dairy cow nutrition. His teaching responsibilities include dairy breeds and breeding, dairy cattle feeding, and dairy farm management. Dr. Hippen also conducts research on nutritional control of milk composition and metabolic disorders of dairy cows with an emphasis on fatty liver syndrome and ketosis.

Dairy Science Facilitators





Dairy Plant Management Ryan Pietz Kelly Trooien Howard Bonnemann

Director of State Dairy Lab Arnold Appelt

Dairy Research Team Tim Bauer, Dan Vander Plaats, Gary Kirkham, Pat Solsaa







Assistant Personnel Margret Jensen, Jane Raabe, Judith Dobbs Not Pictured: Kay Kasperson



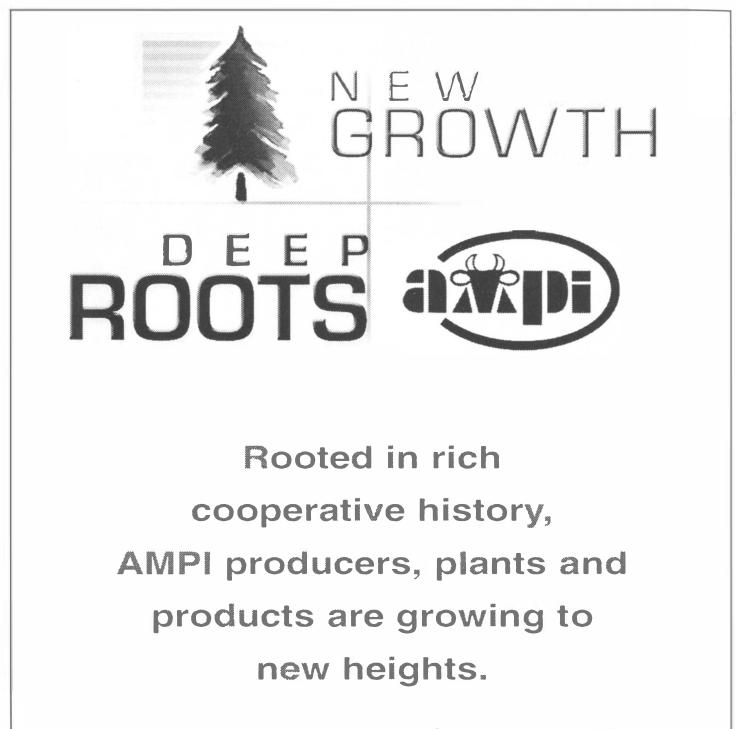
Graduate Students

(Back) A. Abughazaleh, P. Upreti, L. Whitlock,(Middle) N. Ramaswamy, M. Acharya, P. Ruger,(Front) P. Kaothien, P. Sharma, C. Liu,Not Pictured: D. Donovan, C. Sorenson, and A. Reber.



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1999 • 2000

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From President to President

2000



1999

By Curtis Alexander

1999, the last year of the old millennium and of all people, I was president. The year began with our trip to Manhattan, Kansas for the Regional ADSA-SAD meeting.

The trip was memorable as all the Dairy Club activities have been. Darrel Christoph retired from his position as ADSA-SAD Vice-President and I was elected as the Member-at-Large. The next event was Little International where many dairy club members participated. After the Dairy Science Banquet, many bowling parties, and a spring picnic, summer was upon us. However, the summer seemed short, but eventful for members who kept in touch. When school started, our planning began again.

I would like to thank our advisors for their guidance, especially Dr. Henning, for keeping us in line. I would like to thank my executive board for all the hard work. I especially want to thank Melissa Post, Jon Qual, and Janelle Yaggie for their hard work with cheeseboxes, and the rest of the members for participating in the Dairy Club functions.

With graduation near, I am going to miss the Dairy Club. I will cherish these memories for the rest of my life. I am happy to see many new members take an active role in the Dairy Club and hope that they continue to build the Dairy Club into the new millennium. I would like to wish everyone good luck in the future and I hope you have as many unforgettable moments in Dairy Club as I have. Congratulations to everyone that will be graduating in May; I wish you all continued success. I was honored to serve as president of this organization and will miss everyone who is or has been a member of the SDSU Dairy Club.

2000

By Jon Qual

The new millennium begins another exciting year for the SDSU Dairy Club. 1 was elected as president last December. This year began with classic events: bowling and our action-packed ADSA trip to Madison, WI. We hoped to ice skate, but this warm weather has not allowed winter play.

I will provide our club leadership and organization to keep it strong through the year. I believe the new officer team will implement new ideas and continue old traditions, as well.



Dairy Club encourages me and other members to explore the dairy industry. I have gained many new friends, not only in our club, but also across the Midwest, with trips to ADSA and the World Dairy Expo. If past officers had not encouraged me to be involved, my experiences would be limited. My experience from prior executive boards will enable our club to create more memories. Serving as president makes me proud, and I hope to give back to the club as much as I have gained.



Executive Officers

2000



1999

President:	Curtis Alexander	
V. President:	Melissa Post	
Secretary:	Seena Larson	
Treasurer:	Jon Qual	
Historians:	Robyn Kranz Janelle Yaggie	
Activity Coordinators: Stacy Mueller Jeff Spark		





President :	Jon Qual	
V. President:	Melissa Post	
Secretary:	Melissa Pinkert	
Treasurer:	Stacy Mueller	
Historians:	Janelle Yaggie Darin Zoellner	
Activity Coordinators:		

Greg Vold

Anna Alexander

Page Sponsored By: Arthur, Linda, Jeff and Robyn Kranz

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Scholarship Banquet



By Ann Harvey

Money, money, and more money. Assistance for their college education is appreciated always bv college students. The scholarship banquet ended the year for the Dairy Science Department. On the evening of April 6, 1999, \$32,000.00 worth of scholarships was given out to current and future students in the presence of friends, family, faculty and alumni.

The evening was not a pull-up-your-chair-andhere-is your-money event; the evening began with Master of Ceremonies, Curtis Alexander, welcoming everyone before a delicious meal. Following the meal, South Dakota's Dairy Princess, Melissa Pinkert, gave an enlightening speech. Dr. Parsons then handed out the scholarships.

The evening was completed by honoring Dr. David Henning with dedicating the SDSU Dairy Digest to him. It was nice to see a smile for the many years of hard work he has put forth to make the Digest and Dairy Club a success. To cap off the evening, the Dairy Digest was passed out to all attending

The Dairy Science students would like to send out a big THANK YOU to all who sponsor scholarships and make the Dairy Digest possible.







Land O'Lakes Dairy Production Division 111 Kasan Avenue, Volga, SD

Land O'Lakes Ag Center 115 East Highway 14, Volga, SD

Dairy Science Scholarships & Awards 2000 - 2001

JOHN ANDERSON MEMORIAL: \$300 Janelle Yaggie

ASSOCIATED MILK PRODUCERS, INC.: \$300 David Erdmann

ROSS BAKER SCHOLARSHIP: \$400 Steve Janish

EMERY BARTLE MEMORIAL: \$2500 Ann Harvey

BLACK HILLS MILK PRODUCERS ASSOCIATION: \$400 Kimberly Eberhart

BROWN SWISS/GILLETTE DAIRY SCHOLARSHIP: \$500 Arlo Brower

CROSSROAD FARMS/KROGER DAIRY SCHOLARSHIP: \$1000 Jared Wold

DAIRY CLUB SCHOLARSHIP: \$300 Jonathan Qual

DAVISCO FOODS INTERNATIONAL, INC.: SCHOLARSHIP: \$750 Ryan Rolsma

> CHUCK DERDALL: \$500 Stephanie Dummann

GERMANTOWN (USA) COMPANY: \$1000

Sheri Moeller

GILBERT T. & OLGA GILBERTSON MEMORIAL: \$700 Anna Alexander

CLYDE HELSPER MEMORIAL: \$400 Peter Linke

> KERRY INGREDIENTS: \$500 1. Christopher Hongslo

> > 2. Aaron Hennen

LAND O'LAKES FLUID DAIRY DIVISION SCHOLARSHIP: \$400 Jennifer Robinson

LAND O'LAKES – REGION 65 SCHOLARSHIP: \$800 Christopher Gottschall MARIGOLD FOODS SCHOLARSHIP: \$1000 Matthew Siedschlaw

JAMES MARVEL MEMORIAL: \$800 Janelle Yaggie

KIRK MEARS MEMORIAL: \$800 Peter Linke

NORTH CENTRAL CHEESE INDUSTRIES ASSOCIATION 1. Arend Schuurman - \$1500 2. Aaron Hennen - \$1500 3. Steve Janish - \$1200

H. C. OLSON SCHOLARSHIP: \$1000 Trent Griesse

T. M. OLSON SCHOLARSHIP: \$1000 Hope Remiger

RHODIA, INC., SCHOLARSHIP: \$500 Stacy Mueller

ALFRED HERMANN RISHOI SCHOLARSHIP: \$1,000 1. Jonathan Qual 2. Arlo Brower

RALPH ROGERS MEMORIAL: \$400 Jonathan Qual

SAPUTO CHEESE SCHOLARSHIP: \$1000 Kari Kirschenman

JOE E. SCHUCH SCHOLARSHIP: \$1000

1. Kirstin Gebhart 2. Arend Schuurman

SHIRLEY SEAS MEMORIAL: \$900 Melissa Post

SINTON DAIRY FOODS COMPANY SCHOLARSHIP: \$500 Clifford Helkenn

VALLEY QUEEN CHEESE FACTORY SCHOLARSHIP: \$2500 Bradley Sharp

WELLS FAMILY FOUNDATION SCHOLARSHIP: \$1000 Patrick Conlan

SD STATE DAIRY ASSOCIATION:

\$750 1. Bradley Sharp

2. David Erdmann

JOSEPH VAN TREECK SCHOLARSHIP: \$700 Darin Snaza

AWARDS

D.F. BREAZEALE MEMORIAL: \$450 Michael Plucker

FORBES LEADERSHIP AWARD: \$250 Jared Janke

> DAIRY JUDGING – MANUFACTURING: \$150 Sheri Moeller PRODUCTION Curtis Alexander

GRABER-FORD AWARD: \$250 Curtis Alexander

ALFRED TOBKIN MEMORIAL: \$150

- 1. Sheri Moeller 2. Jared Janke
- 3. Beth Larson

HOWARD VOELDER MEMORIAL:

- \$150
- 1. Curtis Alexander
- 2. Wade Gustafson

VIRGINIA DARE AWARD: \$250 Sheri Moeller

FRESHMAN SCHOLARSHIPS

SD DAIRY PROMOTION ASSOCIATION: \$500 Timothy Laleman

SD DAIRY PROMOTION ASSOCIATION - 4-H: \$500 **To Be Announced**

SD DAIRY FIELDMEN'S: \$500 Karissa Nielsen

CLYDE G. HELSPER DAIRY FIELDMEN'S ASSOCIATION: \$500 Dallas Vaughn

DAIRY SCIENCE FACULTY SCHOLARSHIP: \$800 Mark Qual

Page Sponsored by: Dr. David Henning



Little International



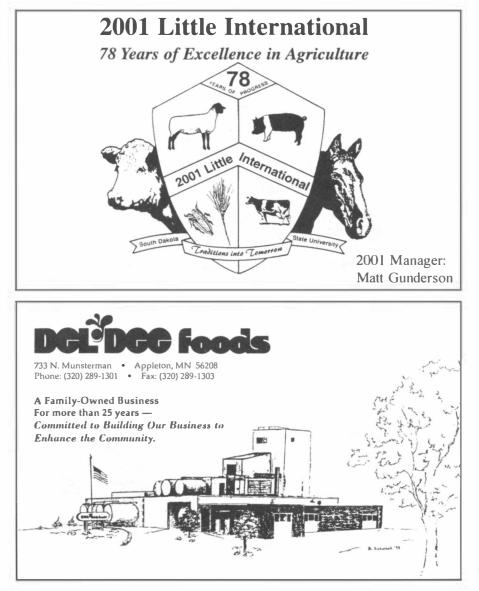
By: Jon Qual

76th The Little International proved to be exciting as it always has been. The show consisted of 10 contestants competing for the top spots in the dairy fitting and showmanship divisions. Two weeks of hard work was put in by all of the competitors at the dairy unit. A few of our challenges included breaking the heifers to lead and also washing and trimming the heifers. By the closing of the event, animals all the had become auite well mannered because of the time put in by the contestants.

Troy Zoellner's fitting skills allowed him to take home the first place honors in fitting. The judge, Warren Drew, chose Curt Alexander as the winner of the dairy showmanship contest. These two may have been our winners this past year, but everyone involved with the contest had a memorable very experience. All involved with Little International remember will the struggles with animals, the socializing with friends. learning new fitting tricks from others, and Darrel Christoph's Holstein heifer turning into one mean-looking beef heifer.



Curt Alexander, Champion Dairy Showman.



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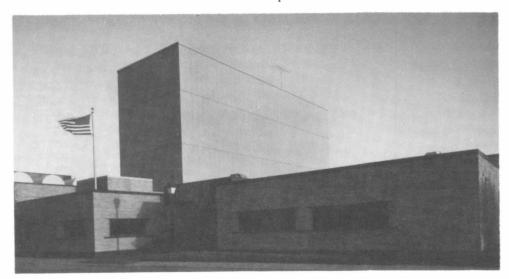
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20

producers are to producing the highest quality milk.

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Club Dicnics

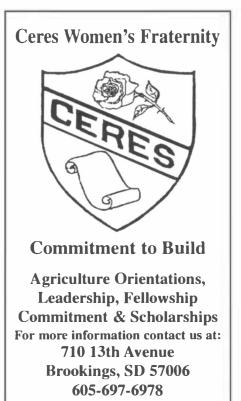


By Ann Harvey

The spring picnic was well attended by members. The club met at Hillcrest Park on a beautiful spring evening to eat sub sandwiches and chips and also have a meeting. Following the subs and meeting, everyone split into teams to play softball, the upperclassmen vs. the underclassmen. Overall, a good time was had by all.

The fall picnic was not held picnic style; we held it in the Dairy-Micro building on campus. The club ate sub sandwiches and chips and then had our first meeting of the year. We welcomed new members and informed them of the exciting year ahead.

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Learning Outside the Classroom



1. Robyn Kranz

2000=

Dannon Yogurt, Ft. Worth, TX Last summer was a tweet of a summer as I traveled to Ft. Worth, Texas to work with Dannon Yogurt. Most birds fly south for the

winter. Not this one! This one flies south for the summer!

The trip south was an excellent experience to add to my nest. This little bird learned everything there is to know about yogurtmaking. Quality control kept the bird feeder full so I was not complaining. I also learned how to operate numerous machines and was challenged with the union dynamics within the plant.

During the summer, we were like birds of a feather who stuck together, as there was six birds total. With so many birds in a Texas feather who stuck together, there was always a bird to tweet with. This opportunity added many new contacts to my flock.

2. Sheri Moeller

Farmland Inc., Kansas City, MO Once again I traveled to Kansas City, Missouri, to work for Farmland Industries. I felt fortunate to return to a company I believed in and could learn from.

I worked in the International Food Sales Division and I was given a variety of responsibilities. Not only did I cold call companies, but I also researched country's marketing data. The highlight of my summer occurred when I coordinated a sales pitch to Farmland's biggest Japanese customer, Jusco Foods. This opportunity allowed me to use my knowledge of Japan, the pork industry and marketing tools.

Many of you may know Farmland and Cenex are pursuing a consolidation so I saw things that I normally would not have seen. There were many meetings about the specifics of the merger and many differing opinions about what was taking place. For someone who is just beginning to look at future employers, this was an invaluable lesson to learn from.

I appreciate this and the other two internships that I have had, as they have taught me numerous lessons which will benefit me in my future dairy science career.



Learning Outside the Classroom

3. Michael Plucker

Dannon Yogurt, Ft. Worth, TX Last summer I interned at Dannon Yogurt in Ft. Worth, Texas. I worked on the production floor where yogurt was filled into the cups, sealed, packaged and sent to the cooler for distribution. Each filling line that I worked on produced a variety of flavors and cup sizes. I was responsible for the quality of the product by checking weights and proper mixing of the fruit and yogurt. This internship provided me with a good experience to learn how a large scale dairy operation works, and I met many new people from a different part of the country.

4. Arend Schuurman

AMPI, Dawson, MN

Last summer I had the opportunity to work at Associated Milk Producers, Inc. at Dawson, Minnesota. While at AMPI, I worked in the cheese department, exploring various manufacturing aspects. I made colored cheddar, white cheddar, and untraditional mozzarella cheeses. It was a good experience and I met many interesting people. I feel that a summer internship is a great way to broaden vour horizons and practice classroom The majority of information I knowledge. gained was practical knowledge, which can only be learned from experience and good coworkers.

5. Matt Siedschlaw

USDA Dairy Grading Branch, WI

For the second consecutive summer, I interned with the USDA. I spent most of my time in Wisconsin, where I worked with processed cheese for government commodities. I addition to cheese, I received training in butter grading, taking milk powder samples, and conducting plant surveys. I had the opportunity to see 11 plants in Wisconsin and Minnesota. This internship showed me how USDA works and what they expect from dairy plants. Another added bonus to this internship was all expenses were paid for, including room, board, and mileage. I would definitely recommend this experience to any dairy science student.

6. Nolan Wolkow

Brookings, SD

This past summer I had the wonderful opportunity to do a special research project under the guidance of Dr. Vikram Mistry. The research was done on the effects of using Brown Swiss milk in the manufacture of non-fat yogurt. I learned how to conduct experiments and run equipment needed to accomplish the experience. I gained experience and knowledge and about research and had fun doing it as well.

7. Paul Ruger

Wells Blue Bunny, LeMars, IA Last summer I interned at Wells Blue Bunny, LeMars, Iowa, in their Research and Development (R&D). R&D has a welldefined roll at Wells that applies innovation and improves product by employing some of the industry's most knowledgeable people. I dreamed up new ice cream flavors and made them. Taste, economics, and feasibility were considerations when creating a new Extensive work was don in flavor. conjunction with ingredient suppliers and flavor houses to achieve the desired product. Most of the products made in the R&D department are had made so the feasibility of reproducing these products in the plant is critical for product quality. Once a new product is made, R&D evaluates it as a group. I was given a chance to develop my own ice cream flavor, which was exciting! My experience was not limited to just ice cream. I worked with yogurt, chocolate milk, sour cream, and drinks as well. I gained valuable experience in sensory evaluation skills by coordinating and participating in the trained taste panels we held almost weekly. This gave me incite into what Wells expects from their products, as well as what the consumer expects. The most important lesson I learned from this summer was from the example set by the men I worked under. I learned how to act and conduct myself professionally.

The Herd



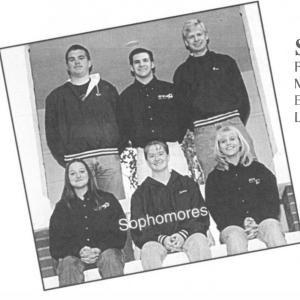
2000=

Juniors (L-R): Arend Schuurman, Jeff Spark. Melissa Pinkert, Melissa Post, Greg Vold, Jon Qual

Seniors

Front Row (L-R): Curtis Alexander, Daryl Christoph Back Row (L-R): Jared Janke, Robyn Kranz, Cari Leuthold, Seena Larson





Sophomores

Front Row (L-R): Janelle Yaggie, Ann Harvey, Stacy Mueller Back Row (L-R): Pat Conlan, Aaron Hennen, Nick Loesche



Freshmen

Front Row (L-R): Sarah Anderson, Catherine Leuthold, Pete Linke, Anna Alexander, Greg Bohn Back Row (L-R): Jenny Robinson, Stephanie Dummann, Kari Kirschenman, Kirsten Gebhart





Ag Bio Bash



By Melissa Post

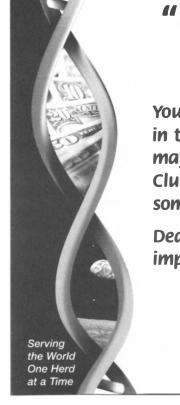
The Ag-Bio Bash was a very successful event this year! Every club within the Agricultural and Sciences Biological arranged booths on the Sylvan Green for everyone to participate in. This year's theme was golfing with everyone creating their own golf hole. The Dairy Club's special golf hole consisted of a pipeline connected to an old milking machine. When people hit the golf ball into the hole they them got to have an ice cream topping. Every club had different golf holes

and different flavors of toppings. ln addition to learning about different clubs and eating awesome ice cream, door prizes were given away. The SDSU Dairy Plant provided the ice cream eaten at the event. A big thanks to everyone who helped and supported the SDSU Dairy Club.





Freshmen signing up for Dairy Club.



"Congratulations on another outstanding year!"

Your experiences in college will prepare you to be a better leader in the dairy industry, no matter what your specific area of interest may be. Involvement in the South Dakota State University Dairy Club teaches those skills and participation in club activities will be some of your best memories during your college years.

Dedicate yourself to help keep the SDSU Dairy Club activities important parts of your education.



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Dairy Gattle Judging Team

2000



L - R: Wade Gustafson, Curt Alexander and Coach Darryl Rennich. a banquet was held at the Exposition Center. traveled home the following morning.

By Wade Gustafson

For the first time in a few years, SDSU had a Dairy Cattle Judging Team. They participated in the National Dairy Cattle Judging Contest at the World Dairy Exposition in Madison, WI. Team members were Curt Alexander and Wade Gustafson, coached by Darryl Rennich. We left on September 24th for the contest. The first three days we traveled to farms around Madison and practiced evaluating dairy cattle. We also visited Hoard's Dairy Farm and toured Nasco. The contest was September 28th. We evaluated a class of heifers and cows from each of the six dairy breeds. A total of 12 classes were judged. After judging, contestants were bussed back to the Radison Hotel in Madison. where reasons were given in sets of six. Next,

a banquet was held at the Exposition Center. We spent the last day at the Dairy Exposition, and

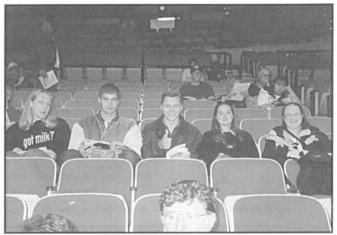
World Dairy Expo

By Darin Zoellner

Dr. Hippen escorted seven dairy club members to Madison, Wisconsin, for World Dairy Expo. The members were Janelle Yaggie, Melissa Post, Seeena Larson, Anna Alexander, Greg Vold, Brian Swier, and Darin Zoellner. Along the way, we toured two outstanding dairy farms including Durst Brothers and Gary Allen Dairy. We saw techniques used in their operations. While in Madison, we visited many displays and booths. Everyone was amazed at the quality of animals being shown since they were the best of the best. The crowning of the new supreme dairy female was the highlight of the trip. Everyone learned about dairy business and had fun too.



Club members visited Durst Brothers Dairy.



Page Sponsored By: Pire's Dairy

Seena, Brian, Greg, Janelle, and Anna at Expo.





The SDSU Dairy Products Judging Team took 3rd place in All Products at the 78th **Collegiate Dairy Products Evaluation Contest** in Chicago, IL, on October 30, 1999. Team members were Jared Janke, Brookings; Beth Larson, Garretson; and Sheri Moeller. Brookings. Nineteen teams participated in the contest. Jared Janke placed 4th in cottage cheese and 5th in milk. Sheri Moeller won the Joe Larson Merit Award, which is awarded to one student in the contest based on professionalism and leadership potential. The team placed 2nd in cottage cheese, 4th in ice cream, and 5th in yogurt, milk, and butter.



L - R: Coach Bob Baer, Beth Larson, Sheri Moeller, and Jared Janke.

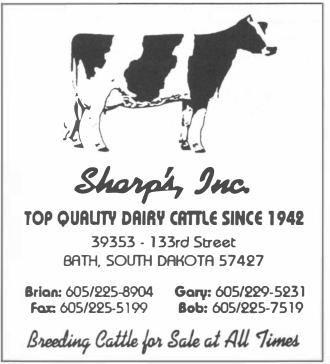
Eight samples of six different commodities

are evaluated - milk, cottage cheese, cheddar cheese, vanilla ice cream, strawberry yogurt, and butter. Products are ranked according to flavor, body, texture, and appearance. Awards are based on how well students match their interpretations of product quality with the official judges. The contest is sponsored by the U.S. Department of Agriculture, the International Association of Food Industry Suppliers, and the American Dairy Science Association.

One week earlier, the team placed 2nd in All Products at the Regional Contest, which was held at Kraft in Glenview, 1L. Alternate team members who will compete next year are Matt Blasé, Canton, and Matt Siedschlaw, Wentworth. The team is coached by Bob Baer.

Next year, the team will compete at the National Contest in San Francisco, CA.





Page Sponsored By: Bob Baer

Hobo Day Parade

By Anna Alexander

2000

The 1999 Hobo Day Parade went to Hawaii, and the Dairy Club went all out! The float included a calf wearing a hula skirt and black sand. Although the theme was "Hot Paradise," it was not warm outside. Instead, it was down right cold! Those who rode the float knew how cold it was and without hot chocolate, it was even colder. After two hours of waiting, we were finally moving. We had fun decorating the float. It was a shame that the black sand only lasted

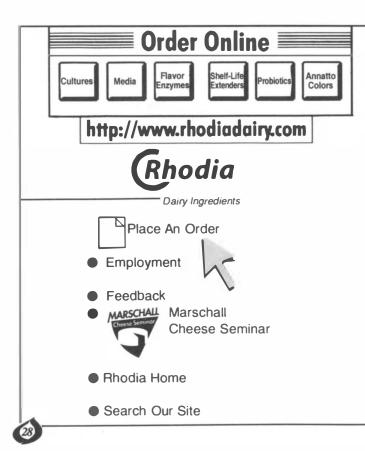
a short time, and the palm tree lasted an even shorter time. We had a calf though, and that is all that mattered according to Melissa Post. Thanks to all who participated in the float decorating, as it was a success!



SD Dairy Princess waves to the crowd.



Club members excitedly pose while riding on the float.



Ordering Takes A Whole New Direction Direction

Cheeseboxes

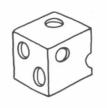


By Janelle Yaggie

Our primary fundraiser, cheeseboxes, has come and gone. This year, we adjusted leadership roles from one chairperson to two and an assistant. The positions are filled with a senior, junior, and sophomore, respectively. This way the assistant will learn every aspect of the from fundraiser the chairpersons and share the workload.

Dr. Henning programmed a UPS program into the computer, so mailing was easier. This was greatly appreciated. The order forms were mailed before Thanksgiving. Upon returning from the holiday, we had orders piled high in our mailbox and filled them until Christmas Eve. The long hours we worked put us well above last year's sales.

The club wants to thank volunteers both and customers who took part in fundraiser. the We especially would like to thank Dr. Henning, Howard Bonnemann. Ryan Pietz, the dairy bar, and UPS. Without these vital people, cheesebox sales would vanish.

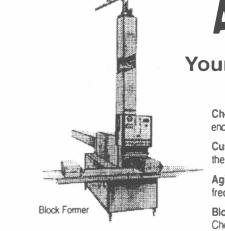


S. Mueller and G. Vold break from cheeseboxes.



M. Pinkert and J. Qual livin-up to cheesebox excitement.





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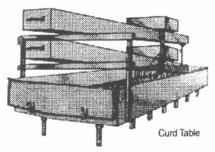
Block Formers. Superior performance Cheesemaker (enclosed draining, matting, milling, salting belts)





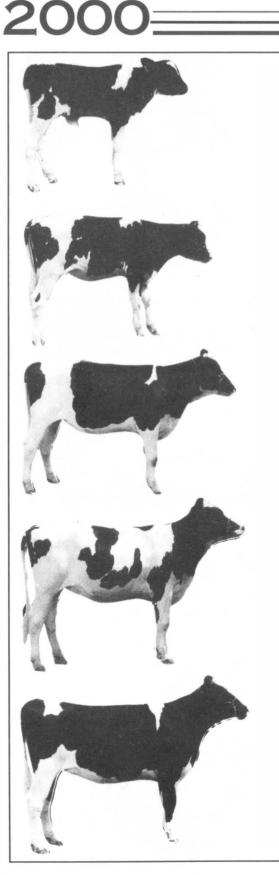
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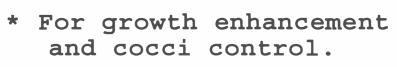


Body Condition Scoring Guide

for Dairy Replacement Heifers

ROCHE

BOVATEC



ADSA - SAD at Madison, WT



Bv: Melissa Pinkert Sixteen dairy club members and our fearless leader. Dr. Henning, left bright early and on February 11th for a long trip to Madison, Wl. The journey to 2000 the ADSA hosted by the University of Wisconsin Madison was slow uneventful. and After our first stop, awake we were and excited. This resulted from Gatorade (Alpine Snow, of course) and some Happy Meal toys. As we approached Madison, we were enthusiastic for a wonderful weekend at ADSA.

We arrived in Madison around 4:00 pm, and checked into our hotel. Our rooms were on the 9th floor, which made for a really cool ride in the glass elevators. After Anthony made sure everyone knew SDSU had arrived, we helped our auiz bowl teams prepare for competition. Both teams did well this year, making it to the 2nd round (do not pay attention to the senior team's 1st round bye). After changing into our dancing clothes. we roamed the hotel meeting people from other schools and then made our way to the dance. The live band



Greg Vold and Dan Reblein dressed in their best for the ADSA banquet.

provoked some odd dancing styles, including a mini mosh pit that Dan was in. After more socializing, we finally retreated to our rooms for a good night's rest.

We awoke the next morning ready to greet the world (some more that others) and attended the morning's business meeting. Kent (1 mean Curt) helped conduct the meeting, while the rest of waited...and us waited...and waited for our morning rolls. The business meeting ran smoothly, as we elected new officers and a new advisor. Next year, the University of Illinois at Champaign will be hosting the 2001(...can we get a bus for that trip?).

Next we went to the neverending UW-Madison campus for a hearty lunch in their livestock pavilion.

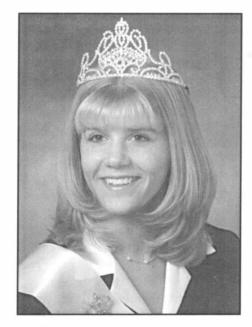
We even got to see the Wisconsin Dairv Alice Princess. in Dairyland. We toured their dairy facility, which was on campus. members Some observed expositions on embryo flushing and ultrasound, while other members caught some shut-eve. Who knew SDSU vans were so comfortable!

After the banquet, some members relaxed in the hot tub, while others socialized with other schools and changed for the dance.

The dance finally arrived, and the excitement involved a fire alarm. Do not worry, we did not do After Melissa Post it. talked to the security guards, we learned it was a false alarm. Late that evening, Ohio State got a hearty farewell by Bianca from Mexico (Melissa Post) and Natasha from Texas (Melissa Pinkert). After more roaming and elevator rides, we finally saw the night end.

We left early Sunday morning despite poor driving conditions. But, we made it back to Brookings safely after a long trip and a few wrong turns. We are already excited for Illinois in 2001!

South Dakota Dairy Princess



2000

Hi! I am Stacy Mueller, the 1999-2000 South Dakota Dairy Princess. I am 19 years old and the daughter of William and Raynelle Mueller of Big Stone City, South Dakota. My older brother Eric, recently graduated from Area Technical Lake School in Watertown, and my younger sister, Jenna, is a freshman at Milbank High School. Currently, 1 am a sophomore at South Dakota State University, maioring Dairv in Production with a minor in Pre-Veterinary Medicine.

activities Mv include Collegiate 4-H where I participate in the annual Phon-a-thon and Clover Classic. I also serve as the Treasurer for the SDSU Dairy Club, and I am Assistant Superintendent Dairy Foods for the Contest held Judging during Little International, well as being a as

participant in the Dairy Cattle Showmanship and Fitting competition.

Our family is currently milking 62 head of Registered Holsteins. I have had the opportunity help with chores to which include feeding baby calves, milking, and throwing hay bales with Eric. Due to activities at school, my choring is limited to weekends. Other dairy opportunities include showing, judging, clipping, giving reports and speeches, and quiz bowl for 4-H, FFA and South Dakota's Jr. Holstein Association.

Since I was old enough to walk, I have been active in the dairy industry. In the

beginning, Т watched Mom and Dad milk the cows and do dairv chores. As I grew older, my responsibilities increased both on the farm and at These school. experiences developed my leadership skills and my interest in the dairy industry. Through mv interests I became aquainted with the Dairy Princess Program.

As the goodwill ambassador for South Dakota's

Dairy Industry, I am proud to represent the industry. So far I have been busy with parades, interviews, and the ADA-SDSU Milk Break Basketball Clinic. During the summer. especial June, Dairy Month, I look forward to attending open houses. dairy shows, and media These events events. encourage the public to consume more REAL products which dairy benefits consumers health.

If you are interested in promoting dairy products, please contact Char Hovland at the South Dakota State Dairy Promotion Association at 1-800-642-3895 or 1-605-692-4812.



Page Sponsored By: David Schingoethe



Princess Ray of the Milky Way





Renae Jorgens of Boyd, Minnesota was crowned the 46th Princess Kay of the Milky Way on August 25, 1999, the night before the Minnesota State fair opened.

As Princess Kay, Renae will act as the official goodwill ambassador for Minnesota's dairy industry

and nearly 9,000 dairy Throughout her farmers. year-long reign, she will make a variety of public and media appearances to educate consumers about dairy and the goodness of dairy foods. Minnesota currently ranks fifth in the nation for total milk production and second for total cheese production. The dairy industry provides nearly \$1.3 billion to Minnesota state's economy each year.

Her main goal as Princess Kay is to educate children about the dairy industry. So far in her five-month reign, she has reached over 2000 elementary students all over Minnesota. She feels that children can learn nutrition skills that will last a lifetime. This is especially important when you realize that 85% of women and 63% of men in the United States do not get enough calcium in their diet.

She is a sophomore at South Dakota State University majoring in dietetics with a minor in communications. Her activities include Collegiate 4-H, Block and Bridle, Dairy Club, and Little International Staff.

Currently, Renae is in a partnership with her grandfather, Delmore Fenske, and her brother. Jason Jorgens raising Holsteins. Her family farms over 2000 acres of corn, soybean, and wheat. She is the daughter of Lois Jorgens and has one other brother Brian still living at home

Renae's love for the dairy industry is key in her role as Minnesota's Princess Kay of the Milky Way.



Best Wishes and Good Luck!

2000



Jamison Vanden Einde

Hometown: Grand Rapids, MN

Degree: Dairy manufacturing

My college activities include SDSU Dairy Club, SDSU Hockey Club, Intramural Flag Football and other non-sanctioned activities.

My most memorable moment was being named "Wabbit of the Week" for outstanding athlete as a hockey player. Also being named Employee of the Semester by Ryan Pietz after completion of the fall of '99 semester.

My most embarrassing moment is when Howard was giving a tour to about sixty little villains, and I had the water hose turned around and completely soaked myself. Of course, nobody saw it or made fun of me.

As a senior, I will to Snaza my ability to excel with little or no studying and to Arend Schuurman a new hat instead of that Holstein-looking thing.

In the future I plan to manage a plant so I can make my own hours and join the Professional Walleye Trail. The best thing about SDSU is of course, the ice cream.

Cari Leuthold

Hometown: Ellsworth, MN

My college activities included SDSU Dairy Club, Dairy Digest Editor, and Little International

My most memorable moment was the day that I finally made the Dean's list. My most embarrassing moment was after doing cheese boxes, Rachel and I were still wearing our hairnets when we went bowling.

As a senior, I will to the Dairy Club the persistence to keep to club "the best club on campus."

In the future I hope to own my own dairy and run it profitably.

The best thing about SDSU is that it is not far from home.





Curtis G. Alexander

Hometown: Bruce, SD

Degree: Dairy Production

My college activities included Farmhouse, SDSU Dairy Club, Little International, Dairy Cattle Judging, and SD Junior Holstein Association

My most memorable moment so many, but two are receiving Reserve Round Robin Showman at Little I and being elected Officer-at-Large at Regional ADSA meeting. My most embarrassing moment was waking up in the girls' room with no pants on at ADSA in Ohio and snoring in Dairy Microbiology and Dairy Cattle Feeding. Sorry Dr. Henning and Dr. Hippen.

As a senior, I will to the freshman the ability to perform well in college but have a hell of a lot of fun too!

In the future, I have no clue. Grow up?

The best thing about SDSU is the people in the Dairy Club. They are fun, dependable and hard working.



Darrel J. Christoph

Hometown: Luxemburg, WI

Degree: Ag Education

My college activities included Farmhouse, Dairy Cattle Judging, SDSU Dairy Club, SDSU Boxing, Dairy Club Activity Coordinator-2 years.

My most memorable moment was Kansas (ADSA). Also, judging with Nielson, Zoellner, and Winquest in Fort Worth, TX.

My most embarrassing moment is pictures of me showing a heifer in my first Little I show.

As a senior, I will to Jon Qual, "the yellow pages" and my afternoon chair at "Rays." In the future I will reside in Luxemburg, WI, where I will trim hooves and sub-teach. I plan to keep my business in MN and SD. My next adventure will be a six-month work experience in Australia.



The best thing about SDSU is the dairy club trips (ADSA) and Farmhouse Fraternity.



Sheri Moeller

Hometown: Brookings, SD

Degree: Dairy Manufacturing

My college activities included Ag-Bio Queen, Dairy Products Judging Team, Alpha Zeta, Ag-Bio Prexy Council, South Dakota FFA officer.

My most embarrassing moment was at National Dairy Judging Contest being introduced to Doug Wells (the owner of Wells Blue Bunny, one of the top ten ice cream producers in the world). I asked him who he worked for.

As a senior, I will to Matt Blasé, Jason Engel's ability to judge dairy products. Good luck Matt!

In the future I will be scrubbing toilets at Wells Blue Bunny or attending grad school at SDSU.

The best thing about SDSU is the faculty, staff, and of course, the Dairy Products Judging Team.

Nolan Wolkow

Hometown: DeSmet, SD

Degree: Dairy Manufacturing

My college activities included Track and Field, Student Athletic Advisory Committee **My most memorable moment** was when Sheri Moeller got showered with chocolate milk. Also, when the filler went haywire.

As a senior, I will to Steve Janish, my helmet, for many years of protecting the things you have learned.

In the future I plan to work my way up to plant manager at a plant somewhere and maybe qualify for the Olympic trials in the Discus.

The best thing about SDSU is the ice cream and the wonderful parking.





2000



Michael Plucker

Hometown: Chancellor, SD

Degree: Dairy Manufacturing

My college activities included intramural sports.

My most memorable moment is the fact that I am actually graduating from college and I did not have to take out any loans.

My most embarrassing moment was dumping out a half-day's supply of milk because I had a valve turned the wrong way.

As a senior, I will to Ryan Rolsma, a few good friends to go down to the bars with after all hard tests.

In the future I want to make enough money to drive to Vegas and lose it all. The best thing about SDSU is the new people you meet and the friends you make.

Matt Renner

Hometown: Pollock, SD

Degree: Dairy Manufacturing, Business Minor

My college activities included intramural sports and extracurricular activities.

My most memorable moment is finally graduating.

My most embarrassing moment was. . . there were too many to mention.

As a senior, I will to Ryan Rolsma, a couple of guys for early afternoon excursions downtown.

In the future I hope to have a prosperous career in the dairy industry.

The best thing about SDSU is the parties, the friends, and the small town atmosphere.





Scott Unterbrunner

Hometown: Carthage, SD

Degree: Dairy Manufacturing

My most memorable moment was checking final scores in Chemistry 106 and receiving scholarships.

My most embarrassing moments were most of my Tech. I test scores.

As a senior, I will to any manufacturing freshman or sophomore willing (or crazy enough) my Tech. I abilities.

In the future I plan to become successful within the dairy manufacturing industry and to enjoy watching my kids grow up.

The best thing about SDSU is the friendly students and the helpful professors.



Beth Larson

Hometown: Garretson, SD Degree: Dairy Production My college activities included Dairy Products Judging Team My most memorable moment was the National Dairy Products Judging Contest in Chicago (1999).

My most embarrassing moment was the first time I led a cow at the dairy unit, and it pinned me up against the barn.

In the future I plan to find a job near Sioux Falls and get married in September.

The best thing about SDSU is the ice cream.



Robyn Kranz

Hometown: Brookings, SD Degree: Dairy Manufacturing

My college activities included: Dairy Club, Institute of Food Technologists-Student Association, Dairy Products Judging Team, CCD Teacher, American Dairy Science Association-Student Association, Dairy Digest Editor, Little International **My most memorable moment** going to nationals in Toronto, Canada and bring home the 1st Place National Dairy Products Judging Trophy and the guys complaining about wet boots.

My most embarrassing moment when I said "good news travels fast." As a senior, I will to Kari, all of my good habits, the pie business and the ability to spell her name for Cy.

In the future I want to be successful in the dairy industry, be a spectator at a professional golf tournament, have a family, and visit Germany and Australia.

The best thing about SDSU is the small friendly atmosphere, an awesome dairy department and the dairy bar.

Lance Thury

Hometown: Parkston, SD Degree: Dairy Manufacturing My college activities included Wrestling, Intramural sports, Student Athletic

Association Committee.

My most memorable moment wrestling in Frost Arena for the last time. My most embarrassing moment writing chalk for an answer in Dr. Mistry's class. As a senior, I will to Ryan Rolsma, a new wife.

In the future I plan to pursue a career in Dairy Manufacturing and start a family.





Garrette Meyer

Hometown: Pollock, SD
Degree: Dairy Manufacturing
My most memorable moment was Dr. Mistry threatening Paul Ruger during our Tech I final.
My most embarrassing moment was living with Ruger.
As a senior, I will to my brother, Seth, my stool at Chevy's and my golden nugget. I trust that he is worthy of keeping up my fine tradition.
In the future I hope to make lots of money.
The best thing about SDSU is that it is not USD.

Jared Janke

2000

Hometown: Arlington, SD
Degree: Dairy Production
My college activities included: Pre-Vet Club and Dairy Club
My most memorable moment was Chicago 1999--- "Who do you work for
Mr. Wells?" and the taxi ride home.
My most embarrassing moment was my whole college career.
In the future I will be working within the dairy industry.
The best thing about SDSU is it stinks.





Ryan Pietz

Hometown: Edgerton, MNDegree: Dairy ManufacturingMy college activities included Alpha Gamma Rho, Dairy Club.My most memorable moment was watching The Price is Right with Pete Bob

and Jamison on Thursday mornings before lab. My most embarrassing moment was always being seen with Pete Bob.

As a senior, I will to Darin Snaza, my ability to get out of bed and make it to class so that I could sleep in class.

In the future I am waiting for Pete Bob to win the lottery and then he can support me.

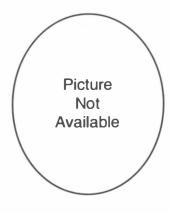
The best thing about SDSU is all the people 1 met while I was here.



Craig Emery

Hometown: Dennison, MN
Degree: Dairy Production, Agronomy
My college activities included Alpha Gamma Rho.
My most embarrassing moment was falling out of a desk in class.
As a senior, I will to Chris Hongslo the job of keeping Cliff in line.
In the future I plan to be an agronomist for Cannon Valley Corporation.
The best thing about SDSU is being done.





Troy Zoellner

Hometown: Groton, SD

Degree: Dairy Production
My college activities included Dairy Club, Dairy Cattle Judging Team, Little International.
My most memorable moment was ADSA-SAD in Ames and Little Internationals.
My most embarrassing moment was at ADSA-SAD in Ames, I fell asleep a little early.
As a senior, I will to my brother, Darin, the ability to uphold the dairy club's traditions.
In the future I am working on the family farm and am married to Rachel Vander Kooi.

The best thing about SDSU is being done.

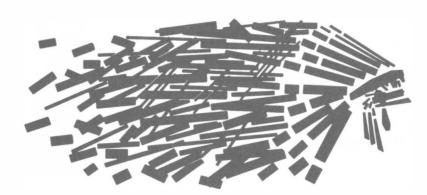
Steve Banks

Hometown: Fedora, SD
Degree: Dairy Manufacturing
My college activities included Dairy Club.
My most memorable moment was ADSA-SAD in Kansas.
My most embarrassing moment was when I got caustic on myself and had to run across the plant removing my clothes.
As a senior, I will to Anthony V. my pair of cool sunglasses.
In the future 1 work with Sunny Fresh Foods and plan to get married.
The best thing about SDSU is all of the good times.





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2000=

ANSWER KEY

Ryan Pietz 2. Nolan Wolkow 3. Michael Plucker
 Cari Leuthold 5. Robyn Kranz 6. Scott Unterbrunner
 7. Curtis Alexander 8. Matt Renner





8



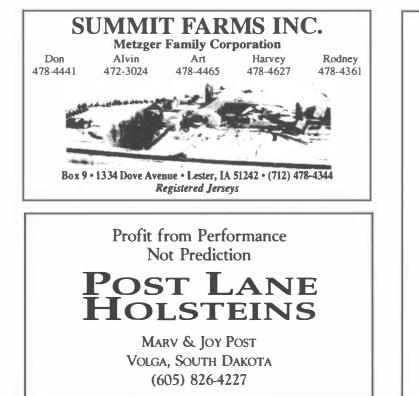


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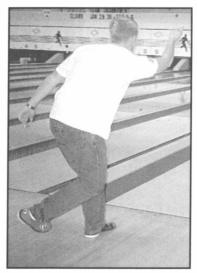
DEAN FOODS COMPANY

Bowling



By Ann Harvey

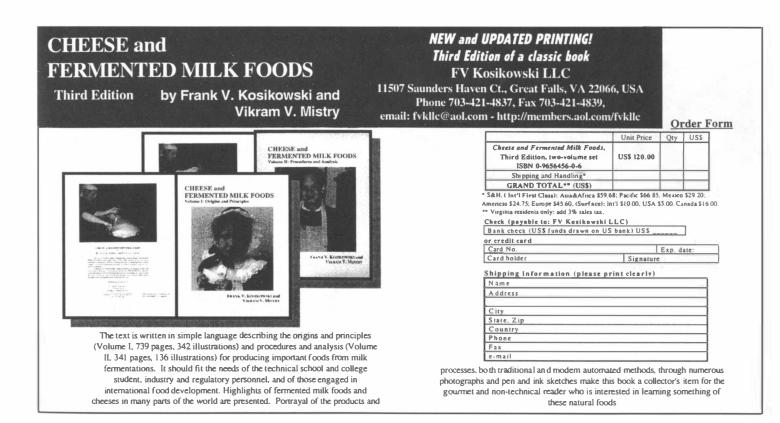
The club favorite activity is bowling! Following the January and November dairy club meetings, the club went to Prairie Lanes. Advisors and club members split into teams and enjoyed an evening away from the books. Some members tried to impress us with their talent, but for the most part, we all had an enjoyable time.



Graceful Qual!!!



Dan, Arlo, Darrel, and Ann.







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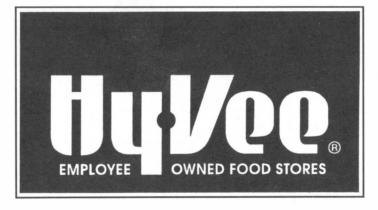


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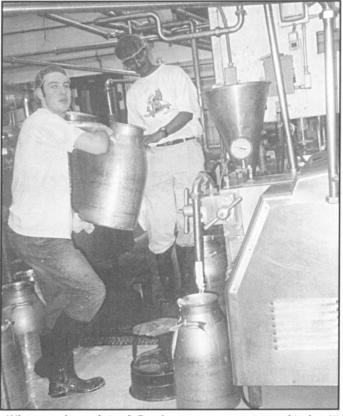
"Hey Post, how's it goin???"



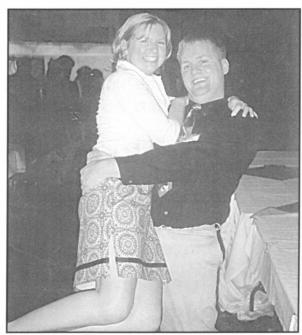
"It's just the normal, right Darin?!"



"Hey Jared, how does she check out??"

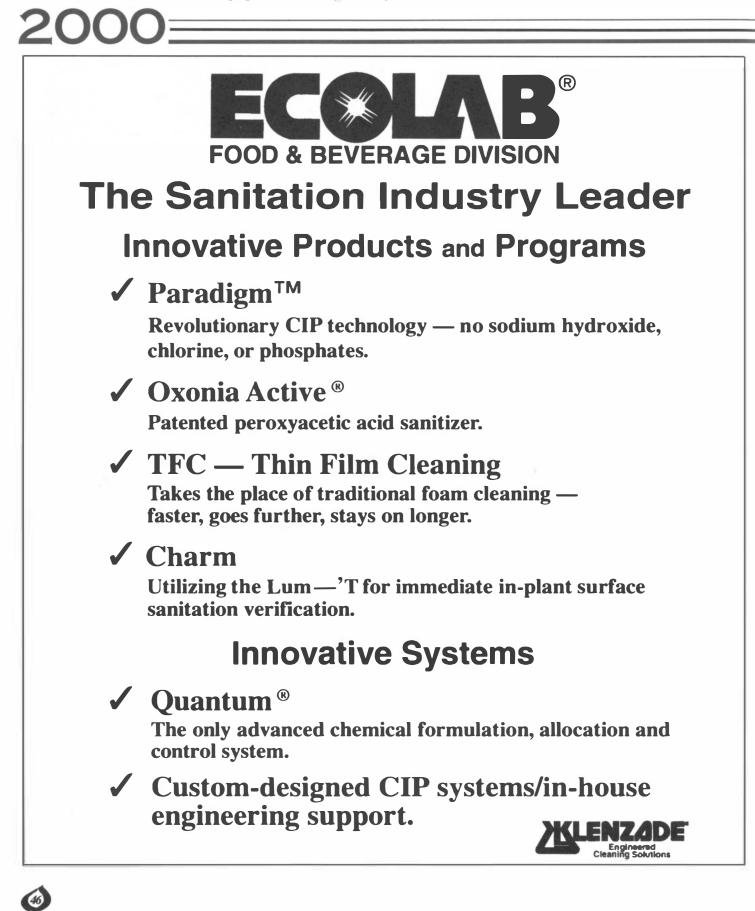


"What you boys doing? Don't want you two in my kitchen!"



"What a cute couple!"

45

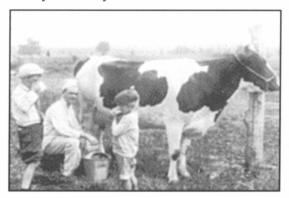


Milking through the Millenium



By Cari Leuthold

Dairying was first founded in the United States in 1525, when the Spaniards first brought dairy cattle into what is now known as the United States. The Spaniards' herds died off and did not return until May 10, 1611, when Sir Thomas Dale sailed into Jamestown harbor, bringing 100 dairy cows and hogs. Even back in the early days of our country, improving the animals' health and well-being was important to the farmers. Dale's 100 cow herd grew and flourished. This herd eventually became a foundation herd for dairy cattle which established today's industry.



In the 1800's, no mechanized machines were available, so the cows were milked by hand. Farmers owned one or two cows, which produced enough milk for their family's. Since refrigeration was not available, most milk was processed into butter and cheese.

In 1895, the first pulsating milking machine was invented. Milking time decreased, but the milk was still transported and stored in milk cans. Pipelines were invented soon after the pulsation system which decreased labor. Milk flowed through a tube into a storage tank.

In the 1930's, there were approximately 4,500,000 dairy farms in the United States. The average number of cows per farm was less than five. The average cow produced less than 4,600 pounds of milk per year.

Refrigeration was invented in the 1950's. This technological advancement allowed larger quantities of milk to be produced, and adequate storage for fluid milk was available. Hence, milk was not processed immediately.

Dairy technology flourished in the 1900's. Milking parlors were designed to position cows at waist level. This increased automation and decreased labor intensity needed on individual dairy farms. Farmers milked large numbers of cows at the same time which increased the farms' efficiency.

In the 1960's, free stalled barns were used instead of herd grazing. This allowed housing large numbers of cows in small areas. The barns increased cow comfort by using rubber materials for bedding.

In 1993, dairy farms decreased to 124,945 in number. Average cows per farm were 75-80, and each cow producing more than 15,000 pounds of milk per year.

Today, the average herd size has increased to 100 cows. The largest herd in the country is well over 20,000 cows. In the United States, the record producing cow milks 75,000 pounds per year.

Each new technology has created today's dairy industry. Continuous changes in technology will be the future of the industry. Present inventions include the automated feeding and cleaning systems, robotic milker, and high temperature pasteurization. Who knows where the technological future will lead us!?!



Manufacturing through the Millenium 2000

By Robyn Kranz	
2000 BC - Butter was mentioned in both Judiac and Hindu religious documents 878 AD -	- 500 AD Attila the Hun battled the Roman legions, invading Asiatic hoards
King Alfred the Great of England stopped at cottages for cheese. Hence the origin of cottage cheese.	- 1611 Cows arrive at Jamestown colony
1700 - Ice Cream came to America with the English colonists. A guest of Governor Bladen of Maryland that described having been served Ice Cream wrote a letter in 1700.	- 1791 First Marie Harel of France de V Camembert cheese
1851 - First cheese factory opened in Rome, New York by Jesse Williams.	- 1856 Gail Borden patented the process of condensing milk.
1867 - Robert McCadam created the Cheddaring Step.	- 1871 The first commercial butter facility in Manchester, IA.
1884 - First glass milk bottles.	- 1894 Pasteurized cream was first used in the butter making process.
1906 - Merrell Sovle Company established the first dry milk plant in Arcade, New York.	- 1938 "High temperature short time" first used.
1980 - First use of the "Real Seal".	- 1994 Nutrition Labeling and Education Act of 1990 is implemented; This mandates nutrition labels on all
	products.

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