Message from the Chair

The Department of Animal Science is fortunate to have so many alumni and friends. That fact not only dates us as one of the older departments on campus but also implies that many people are interested in our activities.

It's been a while since we last published our former newsletter, Tales and Trails. In the fall of 1993, we distributed Highlights, a 63-page sampling of current teaching, research and outreach activities in the department. This publication, however, did not have much to say about our students and the many departmental employees who keep us at the forefront of our field. Consequently, we have decided to resurrect our department newsletter under the "Highlights" name. Our intention is to publish the newsletter twice yearly, in May and November.

This first edition of HIGHLIGHTS is but a sampling of what is to come. We hope you find our new format pleasing and will tell us what you like or don't like about our newsletter so we can continue to provide interesting material for you to read. Needless to say, many changes have taken place in the department in recent years; it may take several issues to bring you up to date. I hope you enjoy hearing from us.

Ed Price
Department of Animal Science, UC Davis

HIGHLIGHTS

A PUBLICATION FOR OUR ALUMNI AND FRIENDS

Spring 1995

Department Raises Money to Assist Students

STUDENTS FIRST is a campuswide campaign to raise more than $15 million over two years to help UC Davis students finance their education and face the future with confidence. Funds will create undergraduate scholarships, graduate fellowships and programs to enrich the student's experience.

Animal Science is the only UC Davis academic department that has been approved to conduct its own component of the STUDENTS FIRST fund-raising campaign. The challenge is to enhance gift-giving because of the closeness of alumni and friends to the department with which they have been associated either as students or by way of professional ties.

Students in Animal Science are faced with increasing fees, heavy debt burdens and the need to work while studying. In addition, the diversity of career opportunities for Animal Science students requires special programs so they can explore and gain practical experience and shorten their time to reach graduation. These include various work opportunities, joint majors, research projects and advanced degrees to fulfill their educational experience. The department's goal is for STUDENTS FIRST to raise $1 million to support these students in several ways.

The first is the Robert Laben Undergraduate Fund, which will provide undergraduate scholarships, financial aid and student-related programs such as undergraduate research projects or work experience. The second goal is to provide graduate student fellowships, research assistantships and research support to be conducted under the supervision and mentorship of faculty or other academic staff.

Supporting research through students at both the undergraduate and graduate levels does two things by yielding not only an educated graduate but also new information from research benefiting those who are interested in animal care and well-being. These funds will be invested as a part of an endowment, with only the earned interest awarded each year. This ensures longterm, stable funding for future generations of Animal Science students.

Finally, named endowment gifts of $10,000 for undergraduates or $20,000 for graduates may be established in the name of the donor or his or her designee.
Animal Science Office Now Serves Avian Sciences Department

As of July 1, 1994, the Animal Science Administrative office began serving the Avian Sciences Department as well. The Animal Science/Avian Sciences administrative office handles functions including telephone, receptionist, hiring, payroll, purchasing, accounting, word processing and room reservations. The office will continue to be located on the second floor of Meyer Hall.

The office consolidation was encouraged by our college as a response to recent years' state budget reductions. Savings in staff, equipment and space are projected. In addition, the larger combined office will enable increased cross-training opportunities for staff and improved backup coverage. While the administrative offices of both departments have been combined into one, the departments themselves have not been combined. Both Animal Science and Avian Sciences retain their own department chairs, budgets and separate faculties, curriculums and research staff.

Another recent sharing arrangement involves advising and student services offices for three Meyer Hall departments: Animal Science, Avian Sciences and Nutrition. All three advising centers are housed in one first floor Meyer Hall advising center complex. Although the three programs remain distinct, students of the three departments benefit from increased staff and space to handle their advising needs.
Department of Animal Science, UC Davis

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News Update

Animal Science Development Board was established in the fall of 1991 to assist the department in meeting its short and long-term goals. The Board consists of 21 external members elected for 3-year terms and meets twice each year in May and November. Current members are listed below. The Department is deeply indebted to the Board Members for their advice and support over the last three years.

Dr. Jack Algeo, Professor Emeritus
CSU San Luis Obispo

Jane Anderson, Executive Director
California Beef Council

William Borror, Owner
Tehama Angus Ranch

Albert G. (Pete) Boyce, jr., President
Boyce Resource Development Company

John Braly, Executive Vice-President
California Cattlemen's Association

Willard G. Clark, President
World-Wide Sires, Inc.

Richard Cotta, General Manager
San Joaquin Valley Dairymen

Dr. Stanley Curtis, Head
Department of Dairy and Animal Science
Pennsylvania State University

Judy Ehlers, Owner & President
Glenwood Farm Hannoverians, Inc.

Ria de Grassi, Director
National Affairs & Research
California Farm Bureau Federation

Robert Gilbert, Executive Officer
A.L. Gilbert Co.
John Harris, President and CEO
Harris Farms

Frank A. Mongini, DVM
Petaluma

Norman Montague, Owner
Montague Pig Farm
(current Board Chairman)

Len Richardson, Editor
California Farmer

Paul Rollin, President and Owner
Sweet-Haven Dairy, Inc.

Roy Sharp, Jr., Owner
Royal Farms, Inc.

Tom Shultz, Dairy Farm Advisor
UC Cooperative Extension

Peter Struffenegger
Stolt Sea Farm

Gordon Van Vleck
Plymouth
(former Board Chairman)

Jay Wilson, Executive Vice-President
California Wool Growers Association
Department of Animal Science, UC Davis

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Department Resumes Recruiting Activities

The most recent early retirement program at UC Davis was so successful that the College of Agricultural and Environmental Sciences exceeded its budget reduction goal. Consequently, the College is providing the needed resources to hire a number of new faculty in critically needed areas.

The Department of Animal Science and the Department of Avian Sciences have been given permission to recruit jointly an assistant professor in developmental genetics. This individual will be expected to develop teaching, research and outreach programs on the mechanisms by which genetics influences biological development.

In addition, recruitment for an advanced faculty position in animal welfare is nearing completion. This position is also offered jointly by the Departments of Animal Science (80%) and Avian Sciences (20%).

Early retirements for Don Bath and John Dunbar in November 1993 left us without a Cooperative Extension Specialist dealing with animal nutrition. The UC Division of Agriculture and Natural Resources has given us permission to recruit an animal nutritionist with emphasis on dairy cattle. Four people were interviewed in February 1995.
Retirement Review

Faculty and Extension Specialists with a total of 250 years of UC service have retired from the Department of Animal Science since 1991. Eight people retired in the three VERIP (Voluntary Early Retirement) programs (UC's form of term limits!), and there was one additional retirement. We recognize the many contributions of these nine people to the department, campus and state.

1. **Bob Ashmore** joined the faculty in 1969 and retired in 1993. Bob's field was muscle biology, and during his early years at Davis, he developed a system of classifying muscle fibers that has become a widely used standard in the field. He worked extensively on characterization of the muscle of cattle with muscular hypertrophy and chickens with muscular dystrophy and developed a rigorous course on laboratory techniques used in animal science research. On his retirement, Bob moved to Arkansas.

2. **Don Bath** completed both B.S. and Ph.D. degrees at UC Davis and joined the Department as Extension Dairy Nutrition Specialist in 1964, a position he held until his retirement in 1993. He pioneered the use of linear programming, using computers to increase the efficiency of dairy cattle ration formulation, and is an internationally recognized authority in the field. He served as president of the American Dairy Science Association in 1985 and 1986. Don and Gloria continue to live in Davis when not at their place at Clear Lake, and Don continues to assist the department and ADSA with assignments related to the dairy industry.

3. **Eric Bradford** came to UC Davis from McGill University in Canada in 1957 and retired in 1993 after serving two terms as department chair (1973-1978 and 1990-1992). A geneticist, he carried out studies on the effects of selection for growth rate and multiple births in sheep, using UC's flocks at Davis and the Hopland Field Station to study the interaction between genetic potential and production environment. The latter work was extended to overseas locations through his participation in the Small Ruminant CRSP. He was responsible for introducing the Finn sheep into California. He co-taught, with Bill Garrett, courses on animal growth and range livestock production. He also did pilot genetics research with laboratory mice and used them extensively in teaching. Since retirement, Eric has been recalled part time by the college to serve as director of the Animal Agriculture Research Center (AARC).

4. **Wally Clark** joined the department in 1976 as Professor and Director of UC Davis' Aquaculture (now Aquaculture and Fisheries) Program, with both freshwater (at Davis) and marine (at Bodega Marine Laboratory) components. Wally built that program into one of the world's best known aquaculture research programs. He is also internationally known for his research on reproduction in marine invertebrates. He moved to Bodega in 1986 to devote full time to this research. The 1994 VERIP opportunity from UC coincided with an invitation to head the Aquaculture Program at the University of Florida, and Wally is well into a new career there.
5. **John Dunbar**'s first position with UC was as Farm Advisor in Humboldt County, from 1957 to 1967. After a short time in industry, he returned to the Cooperative Extension service in Imperial County where he became well known for his work on nutrition and management of feedlot cattle. In 1972, he was recruited to the Davis campus as CE Specialist in animal nutrition. He carried out research in cattle nutrition at Davis and at the Sierra Field Station and helped develop least cost computer programs for feeding and management of feedlot cattle, swine, sheep and horses. John continues to live in Davis since his retirement in 1993.

6. **Ken Ellis** also followed the route from County Farm Advisor (Tehama, 1969-1972) to Campus Specialist (1972-1974), with time out for administrative assignments as County Director in Fresno County (1974-1976) and Regional Director (1982-1988). His field was livestock management, and he had a special talent for working with producer organizations and developing of leadership skills of members of those organizations. He worked closely with the Western States Meat Association and received their WSMA E. Floyd Forbes Award in 1990. He initiated the effort to develop the highly regarded UC Cooperative Extension publications on animal care practices. On his retirement in 1991, Ken and his wife Margaret returned to their native Midwest and are enjoying life on 30 acres in Rockville, Indiana.

7. **Bill Garrett** came to UC Davis as a graduate student and, after completing his Ph.D. in Nutrition in 1958, served five years as Animal Nutritionist at UCs Imperial Valley Field Station. He then returned to the Davis campus as a faculty member in Animal Science and served as chair of the department from 1987-1990. With colleagues Jim Meyer and Glen Lofgreen, he developed the net energy system of feed evaluation, which has had a major impact on efficiency of animal feed evaluation and ration formulation worldwide. Bill taught senior level courses in animal growth and livestock production throughout his career at Davis. He served as president of the American Society of Animal Science in 1983 and 1984 and received the Morrison Award, the highest honor from ASAS, for distinguished contributions to the organization and the field. Bill retired in 1991; he and his wife Ida continue to live in Davis.

8. **Roy Hull** was a Specialist in the Agricultural Experiment Station, Department of Animal Science, for 41 years prior to his retirement in 1991. In addition to conducting research on producing beef on irrigated pasture and on livestock management, Roy was in charge of the department's farming operations and livestock facilities management. He was also the department's primary liaison with the DANR Sierra Foothills Research Extension Center field station. Roy and wife Pat continue to live in Davis.

9. **Bob Touchberry** came to the department in 1981 as chair and Sesnon Professor of Animal Science, following 18 years as a faculty member in the Department of Animal at the University of Illinois and 12 years as head of the Department of Animal Science at the University of Minnesota. During his career, he carried out genetics and breeding search on species from drosophila to dairy cattle. He was perhaps best known for work on the effects of crossbreeding in dairy cattle, in which he studied the effects on production, health and herd life, as well production per lactation. Upon his retirement in 1992, Bob and his wife Carol moved to Ely, Iowa, to live on the farm where Carolyn grew up.

These nine people made diverse and substantial contributions during their many years at Davis. Their retirements (in addition to lowering the mean age of the department academic staff) leave a large void in terms of experience and institutional memory. We wish them all many good years of retirement.

A future edition of this newsletter will "highlight" the contributions of staff who have retired since 1991.
The 1994 Cal Aggie Collegiate Livestock Judging Team had one of the most successful years in its history, dating back to the first recorded team in 1920. The spring season saw the team perform very well at both national level competitions and here on the West Coast.

COW PALACE CHAMPIONS: From left to right: Jessica Weimer, Wendy Weishaupt, Greg Ahart, Rebecca Dell, Melissa Garrod, Dana Van Liew (Coach).

A strong seventh place finish at the National Western Stock Show in Denver was followed by a convincing third place finish at the Southwestern Stock Show in Fort Worth. The team concluded the spring season placing ahead of all West Coast teams at the Great Western in Tulare. The team continued to exhibit a high level of consistency during the fall, posting impressive first-place finishes at both the Pacific International in Medford and the Cow Palace in San Francisco.

Although the 1994 team enjoyed a great deal of success, the experience gained through interaction with livestock people and alumni and the personal skills each team member developed are recognized as equally important benefits of the program.

The 1994 team's success has increased interest in the program both on and off campus. The next team will begin preparation during spring quarter with additional transfer students entering the program next fall.
Notable Notes

In the spring of 1993, Professor R. LEE BALDWIN learned that he had been elected to the prestigious National Academy of Sciences. Election to the National Academy is one of the highest honors that can be given to a scientist in this country, and Professor Baldwin is only the second animal nutritionist to receive this recognition.

Professor Baldwin is known for his research in ruminant digestion and metabolism, nutritional energetics, the physiological mechanisms associated with lactation and the application of systems analyses and modeling in the solution of problems in ruminant animal production. He has contributed more than 225 major publications in these areas and has just finished a text entitled "Modeling Ruminant Digestion and Metabolism".

A seminar series in animal nutrition was held in Lee's honor during winter quarter, 1994. Some of the top animal nutritionists in the U.S. contributed to this series. Professor Baldwin holds the Sesnon Endowed Chair position in the Department of Animal Science. In addition to his research accomplishments, he has one of the heaviest teaching commitments in the department.

Professor GARY B. ANDERSON was presented with the American Society of Animal Science Animal Physiology and Endocrinology Award on July 14, 1994, at the joint annual meeting of the American Society of Animal Science and the American Dairy Science Association held in Minneapolis, MN.

Professor Anderson has pioneered the use of embryo manipulation and transfer to create unique experimental models for conducting research in livestock reproduction. He is a respected leader in applying embryo biotechnology to livestock production.

His research has included studies of controlled twinning in beef cattle, sexing of embryos, physiological basis for genetic differences in gestation period, barriers to interspecies pregnancy and production of transgenic livestock.

Congratulations to Gary!
Professor **EDWARD J. DEPETERS** was presented with the 1994 Outstanding Faculty Advisor Award for the College of Agricultural and Environmental Sciences on May 31, 1994. This award is very special since the nominations are made by students.

Professor DePeters teaches Domestic Animal Production, Dairy Cattle Production and Animal Feeds and Nutrition. He also advises over 30 undergraduates in the Animal Science majors.

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Animal Science Cooperative Extension Specialist **JAMES W OLTJEN** received the California Beef Council's 1994 Strathearn Memorial Research Award for his work on the Cattle Feeder Quality Certification Program and the Cow-Calf Quality Assurance Program. These programs provide beef processors and consumers with assurance that they are getting a consistently high quality product. These quality assurance programs are also helping producers fine-tune their management techniques.

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Professor **ERNEST S. CHANG** was recently honored by being named a Fellow of the American Association for the Advancement of Science. Fellows of AAAS are selected for their efforts toward advancing science and for scientifically distinguished work.

Professor Chang is best known for his research on crustacean growth and reproduction. He is based at the UC Bodega Marine Laboratory.