Update from the Dairy Science Curriculum

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M. Douglas Kenealy, university professor, professor in charge – Dairy Science

Summary and Implications

Several items found in the 'Update from the Dairy Science Curriculum' will also be found in the 'Update from Animal Science' as information related to departmental data on enrollment and careers applies to both programs and is provided for perspective. Fall 2011 enrollment in Dairy Science (DyS) increased significantly from 2010, while the College of Agriculture and Life Science (CALS) surpassed 3,500 – an increase of nearly 300 students in one year. Placement of graduates from Dairy Science remained at 100 percent within six months of graduation – continuing at least a 5 year record. Approximately 170 companies and organizations attended the October, 2011 CALS career fair, another all-time high. A very high percentage of organizations at the career fair also were seeking interns. A second career fair will be held in February, 2012, based upon demand from companies and organizations.

Introduction: Enrollment Continues to Grow in DyS

Enrollment in Dairy Science has continued to rebound since the opening of the ISU Dairy in 2007. During the period of temporary consolidation of the Ames dairy into the Ankeny dairy, enrollment numbers fell due to a misperception that the Dairy Science Curriculum was closing. When building of the new ISU Dairy began, the myth was put to rest and enrollment began to increase. Fall 2011 enrollment in DyS began at 61 undergraduates, and several more students have transferred in during the term. Estimated enrollment for spring 2012 is 70 students. Out of state enrollment continues to grow, with current students representing states from Maryland to Washington. The Dairy Science Club has experienced similar increased membership and has had to move from its normal 60 person meeting room to the larger Lush Auditorium for activities. Concurrently, both the Animal Science (AnS) major and CALS have experienced significant increases in enrollment. Combined DyS and AnS enrollment is 924 students, completing a five year run of record breaking student numbers. Since 2004, enrollment in the department has increased by 350 students or 38 percent. Departmental enrollment is 26 percent of the CALS total for 15 departments. ISU enrollment was at record levels for a third year in a row at 29,887, up over 1,200 from last 2010 (see Table 1).

Table 1. Fall 2011 Enrollment at Iowa State University.

Animal Science undergraduate majors	823
Dairy Science undergraduate majors	61
General Preveterinary students*	40
Total, department undergraduates	924
Animal Science graduate students	73
Total, department	997
Total undergrads, College of Ag/Life Sci	3,584
Total, Iowa State University	29,887

^{*} Majors in animal or dairy science may declare preveterinary medicine options, but the department also manages the undeclared preveterinary medicine program (General Preveterinary Medicine) for the university.

Career Placement

Placement rate continues to keep pace with increased graduation numbers. The 2011 College of Agriculture and Life Sciences Career Services annual report showed 100 percent employment for Dairy Science graduates. Starting salary information collected from spring and fall 2011 graduating senior exit interviews averaged about \$38,000, essentially the same as 2010. Range for starting salaries is from approximately \$30,000 for the federal government to over \$50,000 in the food-related industry.

The CALS 2011 placement report included 20 Dairy Science graduates. Fifteen of the graduates entered the career market and five continued to further education. Selected placement information for the department from the report is found in Table 2.

Table 2. 2011 Career Services Annual Report: undergraduate employment results for animal science and dairy science graduates.

	Number:
Graduates (161 responded to survey)	163
Placed or further education (97%)	158*
Placed in agriculture careers	81
Employment within Iowa	64
Further education**	75
Estimated average starting salary	\$38,000

^{* 158} total = 83 employed + 75 in 'further education'
** "Further education" included graduate studies (MBA, M.S., Ph.D.); colleges of law, medicine, and veterinary medicine; or a second bachelor's program.

The fall 2011 Agriculture Career Day at ISU was again the largest in the nation, and in keeping with the quality of students in CALS and DyS, a new record of approximately 170 companies or organizations attended. The event was hosted in the Lied Recreation Center again this year.

For more information on ISU's CALS Career Services program, please go to: www.career.ag.iastate.edu/

The department's internship program continues to be a great success, this year including students interning outside the United States. Internships ranged from the Florida equine industry to animal health companies, the Smithsonian Institution, and an international zoo. If you want to find out more about the department's internship program, you can view multiple past semesters work at: http://www.anslab.iastate.edu/Class/AnS399%20Internships/

Graduates of Animal and Dairy Science continue to be highly selected for colleges of veterinary and human medicine, law schools, and graduate programs. In 2011, 75 students entered professional programs. This is the largest group of graduates in history to be selected for professional study - approximately a 50:50 split between graduate study and medical/veterinary medical programs.

The department graduated 15 Master of Science (MS) students and 8 Doctor of Philosophy (PhD) students; while many MS students continued for PhD degrees, all PhD graduates entered professional employment. A number of students also graduated in inter-departmental programs, such as the relatively new program in nutritional sciences.

Dairy Science Club Recognizes Leaders

The Dairy Science Club recognizes industry leaders for service to dairying and the allied industry at their annual awards banquet. The club's oldest award, the Honorary Member, was established in 1925 to recognize an active dairy farmer who had significant impact on the dairy industry and/or the Dairy Science Curriculum through extended positive service. Twice in the history of the award, tradition was broken to award to unique individuals: Professor Arthur Porter (1981) and Dr. C. F. Fred Foreman (1987). In 2011, the tradition was again broken to honor Ms. Ilene Carlson, secretary, mentor, and member of the DyS team for 36 years. In 2012, the award will go to Mr. Wayne Dykshorn, owner of Dykshorn Dairy, Ireton, IA. Wayne has had a long record of service to Iowa's Dairy industry, most recently serving as president of the Iowa State Dairy Association. The club's second award, Distinguished

Graduate, was established in 1978 to honor a graduate of Iowa State University who has had significant impact via dairy-related career activities, but has not necessarily been an active dairy producer. In 2011, the club honored Dr. Les Hansen, professor of dairy science at the University of Minnesota, for his dedication to student-related activities on the state and national level. Les received his Ph.D in Animal Breeding and Genetics with mentor Dr. Gene Freeman in 1981. The 2012 recipient will be Mr. Dana Robes, 1967 graduate in Dairy Science. Dana has had tremendous impact on ISU dairy science programs and students by being the principal initiator and supporter of the N. L. Jacobson Professorship in Dairy Nutrition and the C. F. Foreman Scholarships and Dean's Scholars program in CALS.

Discussion

The reputation of the Dairy Science curriculum has been built upon track records of its graduates in dairy production, allied industry, and their service to the dairy industry. The reputation of the curriculum has been strengthened by the addition of tremendous new teaching, research, and extension facilities at the ISU Dairy. It is the goal of the teaching program in the Department of Animal Science to attract qualified young people to be trained as animal scientists. Those students come from traditional rural backgrounds as well as an increasing number from towns and cities. They come from the United States, its territories, and many countries from around the world. The reputation of the animal and dairy science programs is enhanced by the quality of their graduating students, the excellence that graduates bring to their careers and professional schools, and the reputation created by faculty through teaching, research, and extension. Dairy Science students and faculty are proud to represent ISU and proud to have ISU in their pedigree. To refer a young man or woman to become a member of this proud tradition of educational excellence or to track new developments in animal and dairy science teaching programs, facilities, faculty and staff, please visit the following website: http://www.ans.iastate.edu/