

## 2007 Review - Animal and Dairy Science Teaching

### A.S. Leaflet R2366

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#### Summary and Implications

Animal Science undergraduate admissions increased dramatically in 2007 for the third year in a row. Fall 2007 enrollment of 742 students is the highest ever recorded for the department. Large enrollment increases are a 'good problem', but stress laboratory space and teaching and advising loads. Placement rates and starting salaries for graduates of animal and dairy science remained strong, with the average starting salary approaching \$40,000.

New faculty hires in teaching and programmatic developments, such as the Meat Science Minor illustrate the vibrance of the Animal Science department. Major building efforts impacting the teaching program include the opening of the new ISU Dairy in October 2007 and continued planning for a new multi-purpose animal pavilion. These facilities will support excellence in educational programs and will continue the positive enrollment trends.

#### Introduction

The past three academic years have brought significant increases in enrollment for Animal and Dairy Science. Fall semester enrollment increased from 576 in 2004 to 742 in 2007. Reasonable stability in the farm economy and confidence in the career market for graduates partially support enrollment increases, but new programs and facilities also drive increases. New programs such as Beef Fellows and Swine Fellows, plus opening of the new ISU Dairy are major factors. Placement rate, reported for fiscal year 2006 (FY2006), remained strong at 96% for Animal Science and 100% for Dairy Science. Salary information estimated average starting wage approaching \$40,000. Selected enrollment information for fall 2007 is included in Table 1. It should be noted that 27.5 percent of College of Agriculture and Life Sciences undergraduates are enrolled in and advised by Animal Science.

**Table 1. Fall 2007 Enrollment at Iowa State University.**

Animal Science undergraduate majors	641
Dairy Science undergraduate majors	54
General Preveterinary students*	47
<b>Total, department undergraduates</b>	<b>742</b>
Animal Science graduate students	79
<b>Total, department</b>	<b>821</b>
Total undergrads, College of Agriculture	2,697
<b>Total, Iowa State University</b>	<b>26,160</b>

\* 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.

#### Teaching Facilities Update

The building and planning processes for two major construction projects for the department made excellent progress in 2007. Both building activities are phases of the ISU Dairy project. Phase one, building of the new ISU Dairy was near completion on December 31, 2007. The ISU Dairy officially opened on October 20, 2007. Cattle moved to the farm on November 27 and 28. Limited class activity occurred at the farm at the end of the semester because completion of the classroom in the main building will not occur until early January, 2008. Multiple courses will use the classroom and facilities beginning spring semester 2008. Over 600 students should have scheduled animal science courses at the farm next year.

Phase two of the building project is the proposed new animal science pavilion. The pavilion project has moved to the architectural concept and initial budget proposal stage. The pavilion will be located on a portion of the old ISU Dairy site on Mortensen Road south of the Towers dormitories. It will be a multi-use facility that will accommodate classes, outreach activities, and animal events open to the public.

#### Enrollment and Career Placement

Career opportunities and job placement continued to be excellent for animal and dairy science graduates. The latest figures received from ISU Agriculture Career Services for FY2006 are illustrated in Table 2. The fall 2007 Agriculture Career Day at ISU continued as the largest in the nation with over 150 companies or organizations meeting with our students. Again this year a few companies had to be turned away. Agriculture Career Services in Curtiss Hall expects to host nearly 1,000 interviews during this academic year. For more information on ISU's Agriculture Career Services program, please go to: [www.career.ag.iastate.edu/](http://www.career.ag.iastate.edu/)

**Table 2. Fiscal year 2006 undergraduate employment: results for animal science and dairy science students.**

	Number:
Graduates	122
Placed or further education (95%)	115
Placed in agriculture careers	69
Employment within Iowa	53
Further education*	43

\* "Further education" included graduate studies (MBA, M.S., Ph.D.); colleges of law, medicine, and veterinary medicine; or a second bachelor's program.

Table 2 data shows that 69 graduates were employed in 'agricultural careers'. Only three graduates entering the career market selected jobs unrelated to agriculture. The department has historically had a large contingent of students continuing on for further education after receiving the Bachelor of Science degree. This year, that group was one of the largest ever at 43 graduates. An important factor in this movement of ISU students to professional and graduate education is the excellence of our students. As an example of that excellence, in general, they must have grade-points in the 3.5 (4.0 scale) range to be accepted to veterinary medicine. ISU animal science graduates are actively pursued by many of the top graduate programs in the nation.

Of the graduates entering 'further education', approximately ½ matriculated to colleges of veterinary medicine and ½ entered graduate studies. Of those entering veterinary medicine, an increasing number over the past 4 years indicated that they would select a 'mixed animal' or 'food animal' practice. Couple this with the nearly \$50 million building project underway at the ISU College of Veterinary Medicine and the result is very good news for the Iowa livestock industry.

#### **New Faces in Animal Science Teaching**

One of the most exciting developments for the department in the past year has been the advertising and filling of multiple new faculty jobs. The department has filled two full-time teaching faculty positions and one research position in 2007, will offer a third contract in early January, 2008, and has six more positions advertised. All should be filled by the end of summer, 2008. Three of the positions offered were 'Lecturers' – nine month, 100 percent teaching positions. During spring semester 2007,

the department hired Mr. Jeff Thayne to fill the first Lecturer position. Jeff is coaching the livestock evaluation team and teaching in animal science. Ms. Nikki Ferwerda accepted the second Lecturer position and began fall semester 2007. Nikki coaches the equine evaluation team and teaches in the equine program. Both Jeff and Nikki came to ISU from Texas A&M. Interviewing for the third Lecturer position in meat science has just been completed and a new hire should be made early in spring semester 2008. This Lecturer will coach the meat evaluation team and teach meat science. These three Lecturer positions are an excellent addition to the teaching faculty roster. Each remaining faculty position to be filled in 2008 have some significant teaching component at the undergraduate or graduate level to provide much needed expertise and assistance with the increased number of students.

#### **New Program in Animal Science**

One new program will be added to the undergraduate curriculum in animal science in 2008. During the past year, a Meat Science Minor was developed by the faculty working in the meat science and muscle biology area. This minor provides the opportunity for students both within the department and from across the university to complete more intensive study in fresh and processed meats. The minor was developed because ISU has been clearly recognized as having the best meats program in the United States and that companies throughout the meat production, processing, and manufacturing industries are in need of students with more specialized training.

#### **Discussion**

Over the past three years, dramatic increases in undergraduate enrollment, tremendous progress in facilities development, and new faculty hire opportunities have combined to bring renewed excitement to the teaching programs in the Animal Science Department. New educational programs described in previous annual reports, such as the Beef and Swine Fellows programs, and new programs like the Meat Science Minor about to be implemented showcase the educational opportunities for Animal and Dairy Science students at ISU. To track new developments in animal science teaching programs, facilities, faculty and staff, please sign on to the following website:

<http://www.ans.iastate.edu/>