

defend. I believe that if they are alive, they have rights. The fact that they are here on earth, sharing the same land, gives them rights. Just because the buffalo happen to be encroaching upon what humans have claimed to be their territory, it nonetheless does not make it justifiable to extinguish them.

Sarah Houston, senior in Psychology  
Division of Psychology, School of Liberal Arts

4. This issue is similar to almost all environmental issues in our country. You have to consider the citizens' well-being versus the rights of animals. Do the people who raise cattle have more rights than the people who visit to see the buffalo? First and foremost, more research and education must go into solving the ways of transmission of brucellosis to cattle and buffalo. Since this hasn't happened, I must come up with an alternative solution. I prefer to take the utilitarian approach of maximizing the amount of good. Until we know more about the disease, the only solution that maximizes the good is killing the buffalo. This obviously makes the ranchers happy because it guarantees healthy cattle. It might not seem to make the "buffalo supporters" happy, but I will try to explain. The buffalo have no predators and thus have the ability to grow too large of a population. From the given facts I'll assume a harsh winter only occurs 1 out of 4 years. The situation must be monitored as to numbers killed. If after killing, the buffalo still maintain healthy population sizes, then the people who enjoy buffalo will have enough animals to see. If the killing gets out of hand, everyone must be warned that the shooting must cease. This leads to a deontological position of avoiding the worst case scenario,

which would be killing all the buffalo.

I agree that the buffalo have rights to maintain suitable population sizes that lead to healthy buffalo. This does leave room for buffalo to be shot, but only if numbers are above healthy levels. In the end, neither ranchers or buffalo supporters will be totally happy. If you can maximize good as much as possible for both sides, then they will be able to co-exist.

Matt Potrzebowski, senior in Ecology  
Department of Biological Sciences, School of Liberal Arts

5. I do not think it is the most effective method, but I believe that ranchers have the right to protect their cattle from even the threat of contamination. The livelihood of Americans is more important than the buffalo. However, I do not want the bison exterminated, to be sure. I hope that the state can find some better alternative than the ones currently in use. But, yes, I do believe it is acceptable because it seems to be the only safeguard right now.

I do not believe that animals have rights. However, I also do not believe in killing something without reason, whether it be for food, to protect livestock, etc. I love wild animals and I hope the bison are around for a long time, but I do not think that ranchers should be denied their rights to protect what is theirs. It is the responsibility of the government, I think, to either help protect the cattle, or if public opinion calls for a stop to the killing, to reimburse ranchers for any harm that may be done. Hopefully, though, scientists can solve this problem somehow.

Jeremy Mills, senior in Wildlife Management  
Department of Forestry and Natural Resources,  
School of Agriculture

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## Attitudes and Perceptions of Recent Agricultural Sciences Graduates

Lee Cole and Wayne Fanno  
Department of Agricultural Education and General Agriculture  
Oregon State University  
Corvallis, OR 97331-2204

### Abstract

The study involved alumni from the College of Agricultural Sciences at Oregon State University. The objective was to identify perceptions of alumni regarding their education. Survey results from alumni of the College of Agricultural Sciences (CAS) indicated that 1) most alumni were transfer students, 2) alumni were satisfied with the CAS

portion of their educational experience but not as satisfied with the university-wide portion of their education, 3) the research efforts of the CAS instructors were generally appreciated by alumni, 4) 81.4 percent of the alumni were employed, 5) most employment was related to the students' major (67.9 percent), and 6) alumni were not active in formal continuing education.

## Introduction

In June of 1997, the OSU Alumni College was established. Undergraduate students from Oregon State University (OSU) not only received their diplomas, but also a lifetime post-baccalaureate student status in the OSU Alumni College. Translated this would mean that students could simply have their records reactivated to complete additional minors, second majors, or take any course they desired. There would be no reapplying or paying admission fees (OSU Statewide, 1998). The OSU Alumni College reframes the way our university looks at "former" students. All graduates are to be treated as "future" students. In a sense, OSU recruits its own graduates.

The attitudes and perceptions of graduates are important to the success of universities. As already stated, graduates can be perceived as future students and their attitudes are important to maintaining their participation. Cole and Fanno (1999), Donnermeyer and Kreps (1994), and Scofield (1995) documented the importance of alumni and parents who are alumni in recruiting new students. The recruitment and retention of students at the university is important to the success of most major higher education systems. This has been especially true of colleges of agriculture which will likely see an increased demand for agricultural and allied graduates throughout the next decade and a continued shortage of trained graduates (USDA, 1995). To provide an effective strategy for the recruitment and retention of new students, a better understanding of the students who had successfully negotiated the system was desirable. Further, alumni comments were perceived as being of great value to correcting problems which may currently exist regarding issues effecting recruitment or retention.

For the past several years the College of Agricultural Sciences (CAS) at OSU has maintained higher than average growth as compared to other colleges in the university. However, retention remains a major concern for all colleges at the university. Research directly related to alumni attitudes and perceptions, and how that relates to recruitment and retention was not available. Several recent studies have explored graduates and their socioeconomic status (Barkume, 1998; Shock, 1998; Eide, 1997). Far fewer surveyed alumni for their attitudes and perceptions as related to their specific college or university. Brannan (1994) explored the attitudes and perception of graduates from Baptist Bible College and found most were satisfied with their educational experience. Sorensen (1996) found that graduates from Brigham Young University did understand the need for the alumni to contribute to the university after graduation. The objective of this study was to describe "what is" which in turn may help describe "why".

## Methods

The purpose of the study was to identify the perceptions of alumni of the CAS at OSU regarding the character and quality of their education. Alumni activities and trends were viewed as important to student retention and recruitment.

Specifically, the objectives of this study were to:

1. Identify perceptions of students with regard to program quality and factors which contribute to program quality.
2. Determine alumni current employment.
3. Elicit alumni suggestions for program improvement and areas of satisfaction.

Students who had graduated during the immediately preceding two years (96 and 97) were surveyed. There were 404 students in the population. A final total of 280 usable surveys were returned for a 69 percent return rate. The original mailing plus three follow-ups were used, for a total of four mailings. Incentives to respond were used for the mailings. The entire population was surveyed, therefore the statistical analysis procedures used were frequency counts, percentages, and means. The mailed instrument was developed by the Survey Research Center at Oregon State University. Validity and reliability were determined by a field test of alumni who had graduated before 1996. Both quantitative and qualitative responses were sought by the researchers.

## Results

The Survey Research Center at Oregon State University divided the population into three equal parts to test response rates by incentives. Table 1 displays information regarding the various incentives and their results.

Beyond the obvious advantage of an 82 percent return rate for the \$5 incentive group an additional advantage to the \$5 incentive was that over 81 percent of that group had returned their surveys by the end of the second follow-up mailing. It was therefore felt that the third mailing could have been skipped because of the very small additional return on the third follow-up for that group.

When students were asked how they first enrolled in the CAS at OSU the results indicated that transfer from community colleges and other OSU colleges was a very important source of students (Table 2).

Table 1. Response Rate by Incentive for OSU Agricultural Sciences Alumni (1996 and 1997

Graduates).

	<u>Number in Group</u>	<u>Incentive</u>	<u>Return Frequency</u>	<u>Percent of Alumni Responding by Incentive Group</u>	<u>Percent of Total Response Group</u>
	131	none	76	58	27.1
	134	\$2 Bill	90	67	32.1
	139	\$5 Bill	114	82	40.8
TOTAL	404		280		100

Notice that Table 2 indicates that not many students are delaying their plans to enter college by working or military service. Transfers from other universities, community colleges and other colleges at OSU totaled 66.1 percent, most of which (27.9 percent) came from community colleges. Transfer recruitment should receive major attention as a source of students for CAS programs.

Colleges at OSU from which most students transferred were the College of Science at 6.4 percent and the

College of Engineering at 4.6 percent.

When asked if they changed majors after entering the CAS, 85.4 percent of students said "no".

When asked to describe their satisfaction with various factors associated with their education at OSU, students responded as described in Table 3.

Table 2. Student Enrollment Source Data for OSU Agricultural Science Alumni (1966 and 1977 Graduates).

<u>Source</u>	<u>Frequency</u>	<u>Percent</u>
Enter as Freshman	68	24.3
After a Year or More Off (Working, Military, etc.)	22	07.9
Transfer from Another University	48	17.1
Transfer from a Community College	78	27.9
Transfer from another OSU College	59	21.1
Missing	5	01.8
<b>TOTAL</b>	<b>280</b>	<b>100</b>

The means reported in Table 3 indicate that students were satisfied with College of Agricultural Sciences segments of their education whereas the university-wide segments were generally less satisfactory. Unfortunately the students were not asked to differentiate between their CAS program orientation class and the university-wide orientation course.

When students were asked about their instructors' research efforts 53.2 percent reported that instructor research efforts improved instruction. Ten (10.4) percent reported that instructor research efforts detracted from instructional quality, and 21.1 percent reported that it had no impact. Land Grant institutions promote the idea that research is getting

directly into the classrooms because instructors also are required to do research. This ideal may not be currently fulfilled to the level desired.

When students were asked about participation in student activities, 51.8 percent reported involvement with CAS activities and 58.3 percent reported involvement with OSU activities. CAS activities included student clubs and departmentally sponsored trips, whereas OSU activities included student body and athletic events.

Table 4 describes the current employment of CAS Alumni. Nearly three fourths of the alumni were employed full-time.

Table 3. Satisfaction Levels for OSU Agricultural Sciences Alumni (1996 and 1997 Graduates).

<u>Factor</u>	<u>Satisfaction Mean*</u>
Academic Advising	1.75
Quality of Teaching	1.83
Quality of Course Content	1.91
Availability of Classes	1.90
Variety of Courses/Curriculum	1.91
Class Size	1.76
Testing & Grading Practices	1.94
Classroom Facilities	1.98
Laboratory Facilities	2.05
Computer Facilities	2.31
Valley Library	2.72
New Student Orientation Program	3.15

1 = very satisfied; 2 = satisfied; 3 = dissatisfied; 4 = very dissatisfied

For individuals not employed for pay who were identified in Table 4, 13 (4.6 percent) were actively seeking full-time employment. Two (0.7 percent) were seeking part-time employment and 19 (6.8 percent) were not interested in paid employment. It seems reasonable that if alumni are not seeking employment their numbers should be clearly identified to reduce concern regarding employability of program graduates.

Alumni were asked if their employment was related to their college major. Nearly forty-eight percent (47.9%) said their major was directly related to their employment. Another 20 percent said that their employment was somewhat related to their major and 20 percent said that their employment was not at all related to their major. Table 5 identifies reasons why alumni had employment either somewhat related to their major or not at all related to their majors.

Table 4. Current Employment of OSU Agricultural Sciences Alumni (1996 and 1997 Graduates).

<u>Employment Status</u>	<u>Frequency</u>	<u>Percent</u>
Employed Full-Time	209	74.6
Employed Part-Time, Seeking Full-Time	19	06.8
Employed Part-Time, Not Seeking Full-Time	18	06.4
Not Employed for Pay	34	12.1
<b>TOTAL</b>	<b>280</b>	<b>100</b>

Note that alumni who answered either that their employment was not related or somewhat related to their majors were allowed to respond to as many items in Table 5 as were appropriate for them. Therefore, the totals exceed the numbers of 280 and 100 percent respectively. The only item listed in Table 5 which a college of agriculture's staff could impact would be that of the highest rated response, "Too few jobs available". Not that colleges of agriculture should be in the business of creating jobs, but rather that knowledge of the potential job market should be communicated to students early in their degree effort.

Over two-thirds (67.9 percent) of the alumni were employed in Oregon, making an average salary of between \$2100-\$2800 per month. Seventy-two percent (71.8) reported that they were not currently involved with formal continuing education (i.e. Grad School, Professional School, Community College, or Technical School).

Alumni rated the quality of their education in the CAS at OSU as five (5) on a one to seven scale, with seven

being very high. When asked why they gave the rating they did the open-ended question responses included 180 comments regarding curriculum, 76 comments regarding teachers and 12 comments on facilities. These comments were predominantly positive.

Median age of alumni respondents was 26 years. Gender distribution was 59 percent male and 41 percent female. Alumni reported that 76.8 percent of them had immediate family members who had graduated with a Baccalaureate degree.

### Recommendations and Conclusions

Recommendations and conclusions which arise out of this study include the following:

1. Most CAS alumni (66.7%) are transfer students. The CAS should focus on recruiting transfer students from multiple transfer sources.

Table 5. Reasons Why OSU Agricultural Sciences Alumni Employment Was Either Somewhat Related or Not Related to Their Major (1996 and 1997 Graduates).

<u>Reason</u>	<u>Frequency</u>	<u>Percent</u>
Salary in field not adequate	35	12.5
Too few jobs available	66	23.6
Became interested in another field	48	17.1
Kept the position I had before starting college	11	3.9
Had training in another field	43	15.4
Current position will lead to a job more directly related to CAS major	14	5.0
Did not intend major to be job related	10	3.6
Wanted to live in a specific area	47	16.8
Had to meet needs of other family members (spouse, children, etc.)	37	13.2

2. Alumni were satisfied with the CAS portions of their total educational package but appear to be less satisfied with university-wide portions of their education. Efforts should be made at the university level to improve those educational functions which were dissatisfactory to alumni. This is especially true given that OSU has embarked on a campaign to recruit its own graduates for adding majors or minors to their currently completed degree work.
3. The research effort of the CAS instructors was generally appreciated by alumni. However, one would have hoped for a higher response than 53.2 percent of the alumni saying that the instructors' research had a positive impact on instruction. It is recommended that a research study be done to determine if instructors who do research bring their research to the classroom in such a way that students appreciate the extra value they gain from such exposure.
4. While one might hope for more than an 81.4 percent employment rate for college alumni, the fact remains that nearly seven (7) percent were not seeking any type of employment. However the CAS should make an effort to advise students of employment potential when students first enter a major. With so much time and money invested in ones education students should be fully aware of employment opportunities by major.
5. Most alumni employment (67.9 percent) was related to their CAS majors. The most common response for not being employed in an area related to their major (23.6 percent) was, "too few jobs available." The CAS should provide information to students regarding potential future employment as the students enter their orientation courses or elsewhere early in the student's degree effort.
6. Alumni were not actively involved with formal continuing education (another degree or certificate). Further study might reveal that informal educational programs become important to alumni (i.e. Extension Service programs).

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## Perceived Benefits Of An Agricultural Capstone Course At Iowa State University<sup>1</sup>

Randall J. Andreasen, Assistant Professor  
Agriculture Department  
Southwest Missouri State University  
901 South National Ave.  
Springfield, Missouri 65804

Larry D. Trede, Associate Professor  
Agriculture Education and Studies Department  
Iowa State University  
206 Curtiss Hall  
Ames, Iowa 50011

### Abstract

This study compared the quality of a capstone course in the College of Agriculture at Iowa State University to other junior/senior level courses and determined which activities in the course were most beneficial to course graduates. The capstone course used was AgEdS450 in the

Agriculture Education and Studies Department.

Course graduates perceived that AgEdS450 provided more hands-on experiences, more student-student interactions, and more experiential learning than other junior/senior level courses. They also felt that AgEdS450 was "equal to" or "greater than" other courses in student-directed learning, putting course objectives into practice, problem-solving, and decision-making. Many of these factors fit the Crunkilton criteria for capstone courses. AgEdS450 allowed students to apply the knowledge gained from other courses. Preparing written and oral reports was beneficial in their first professional position.

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