

# Choosing a College



## Graduates with farm and ranch experience are in demand.

by Boyd Kidwell

This is an exciting time to be choosing a university. If you have a farm or ranch background with experience raising livestock, the grass is really greener on your side of the fence.

Why? The number of students entering college with hands-on food animal experience is at an all-time low. At the same time, the need for college graduates in businesses that produce and market food has soared. The result is a demand for graduates in agriculture-related jobs that your parents could never have dreamed about.

Still, choosing a field of study and a school from among the great options is a daunting task. Your decision should be based on personal goals, and your choice shouldn't be influenced by where your parents went to college or where your best friend plans to go.

"Make sure you're going to a university because it ignites your curiosity and is a great environment for you. The best way to decide is by visiting several universities and talking with students and faculty," says Colorado State University (CSU) professor Tom Field.

Field isn't a big fan of using ranking lists to choose a college. Instead, the former CSU Favorite Faculty of the Year winner emphasizes investments in campus visits that include looking into clubs or activities outside of course work. He lists Block and

Bridle; livestock judging teams; academic/service societies such as Spurs, Golden Key and

Mortar Board; summer research programs; student government; and service clubs as activities that offer opportunities for building permanent professional and personal relationships.

Field also recommends studies outside of traditional ag majors.

"If you don't double-major, at least minor in something that adds texture to your life. Well-rounded representatives will be a key to agriculture having influence on our society," Field says. Ideas for minor study areas include music, art or history.

### Growing careers

Rather than picking specific hot majors for

students, Fields points to four areas that have growing needs for top-quality graduates:

**Animal welfare.** Food producers are under increasing pressure to raise animals in management systems that line up with mainstream cultural values. This doesn't mean bowing to demands by animal rights extremists, but designing management systems that are acceptable to most consumers and that meet third-party audits.

**Environmental management.** Agriculture will continue to be under heat to produce food in cost-effective ways that protect environmental quality.

**Food safety.** Each outbreak of foodborne illness or meat recall gives the food industry a black eye. Graduates from several majors are needed to help companies provide safe food products.

**International marketing.** If we want to market our industry, we must be able to sell products overseas. This area provides exciting opportunities for graduates who want to travel and to learn about other cultures.

Recent trends in agriculture have opened up interesting opportunities for today's students. For example, a growing number of absentee landowners are looking for college graduates with practical experience to manage farms and ranches. Small meat companies have consolidated into large corporations that need college graduates with experience managing and developing high-quality food animals.

"There are increasing opportunities for college graduates who prefer a ranch lifestyle, but you'll have to pay your dues," Field says. "For graduates that want high salary levels and don't mind living in urban areas, food



### Homework checklist

- ▶ Consider your home-state colleges. In-state tuition usually costs much less than tuition for out-of-state students.
- ▶ Identify your primary species. Are you interested in a career associated with beef cattle, or do you prefer another species? A college tends to emphasize research and education on species of livestock, forages and production systems that are important in its home state.
- ▶ Check out clubs, livestock judging teams, internships and service associations. Looking back, most college graduates say the friends and contacts they made outside the classroom have helped in their careers.
- ▶ If you need to stay close to home, consider regional universities, community colleges and two-year programs.
- ▶ Ask for the student-to-teacher ratio.

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marketing and processing companies offer excellent opportunities.”

### Changing times

“Animal science is a very different creature today than it was 20 years ago,” says Linda Martin of Oklahoma State University (OSU).

Martin should have a great overview of animal science education across the U.S. A native of Maryland, Martin earned her bachelor’s degree in animal science from Ohio State University, her master’s degree in animal breeding and genetics from Virginia Tech, and her doctorate in animal breeding and genetics from CSU. She is currently assistant dean of the College of Agricultural Sciences and Natural Resources at OSU.

Rather than choosing a school based on rankings or reputation, Martin recommends visiting campuses and attending classes with students.

“Go to class with a student and get a sense of what it’s like to attend that school. The most important thing for any student is the fit with a school,” Martin says. “Other important considerations are student-to-teacher ratio and the school’s investment in leadership programs.”

With 750 students, animal science is the largest department at OSU. Martin also points out that the university provides \$750,000 annually in scholarships for ag students. As for job outlooks, here are several agriculture-related areas that are attracting OSU graduates:

- ▶ **Food science.** Processing, packaging and developing new food products are rapidly growing fields.
- ▶ **Meat science.** Colleges aren’t producing enough qualified graduates to fill open positions at meat-processing companies.

Concerns about food safety have created hundreds of new jobs.

- ▶ **Business.** The business option includes core courses in animal science and often leads to jobs in banking, business management and livestock production.
- ▶ **Biotechnology.** This popular option often leads to graduate school. Companies are looking for graduates with up-to-date skills in microbiology.
- ▶ **Communications.** OSU recently expanded its ag communications option with additional journalism courses. Communications majors have a wide selection of opportunities, including editorial staffs on livestock publications and public relations departments of corporations.
- ▶ **Veterinary school.** OSU has a large group of pre-veterinary students. Food animal veterinarians who are willing to relocate into rural areas are needed.

“Animal science and agribusiness are more dynamic and interdisciplinary today than they were 20 years ago. I’d recommend that prospective students go to the web sites of several colleges to get a feel for the schools,” Martin suggests.

### Cost-conscious

For students (and their parents) concerned about costs, your home state’s colleges may be the best educational bargain. For example, tuition for North Carolina residents at North Carolina State University (NCSU) is one-third the cost of tuition for out-of-state students. Most of the students entering NCSU’s animal science program have urban backgrounds and plan to attend the school’s College of Veterinary Medicine that was

recently ranked one of the top four veterinary colleges in the nation.

“About 80% of incoming freshmen in animal science say they’re pre-vet. After they are here for a while they find out about other opportunities, and many students go on to graduate school and enter careers in other fields,” says NCSU professor Jeannette Moore.

NCSU also has an excellent two-year program called the Agricultural Institute in the College of Agriculture and Life Sciences. The institute offers 10 degree programs and has an enrollment of 376 students. Professors who teach in NCSU’s four-year program also teach ag institute classes. Graduates of the ag institute are heavily recruited and the average starting salary of graduates was \$28,000 in 2002.

If you want to stay home or prefer a smaller campus with small class sizes, investigate opportunities at regional universities and community colleges. Some of these schools have developed very good animal science programs that include a great deal of hands-on experience with livestock.

“Regional universities focus on facets of agriculture unique to that part of the country,” says Mike Phillips, department chair for agricultural and human sciences at Morehead State University in Morehead, Ky. “We have a very hands-on program at Morehead State. Some land-grant universities have gotten very specialized. At regional universities, our students are exposed to a lot of different things.”

Kentucky has four regional universities located across the state, so most students are within an hour’s drive of a school’s agriculture and animal science programs. Many other states have networks of regional universities and community colleges, so



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▶ Demand is growing for college graduates with farm and ranch experience.

▶ Hands-on experience is an important part of many animal science courses.

students from most rural areas have schools within commuting distance.

### Veterinarian shortage

Students who go on to become veterinarians may be in the driver's seat when it comes to finding jobs. A recent study by the American Veterinary Medical Association (AVMA) forecasts a looming shortage of food animal vets. For every 100 food animal veterinary jobs, there will be only 96 vets available to fill the positions.

Part of the reason for this shortage is that most students entering veterinary colleges come from urban backgrounds. Once they become vets, these graduates often join small-animal practices in cities. As a result, some vet schools are recruiting students with farm and ranch backgrounds.

"We give strong consideration to applicants with large-animal backgrounds, and some of our students go back to their high schools to recruit new students from rural areas," says Grant Turnwald, associate dean of academic affairs at the Virginia-Maryland Regional College of Veterinary Medicine.

Even with a looming shortage of veterinarians, there are still several qualified applicants for every student opening at colleges of veterinary medicine in the United States. For applicants not able to gain admission to U.S. schools, there are alternatives.

For example, in the Caribbean, Ross University on the island of Saint Kitts ([www.rossu.edu](http://www.rossu.edu)) and Saint George University on the island of Grenada ([www.sgu.edu](http://www.sgu.edu)) offer Doctor of Veterinary Medicine programs. Upon completion of pre-clinical training, students at these Caribbean schools return to the U.S. and participate in clinical training programs in U.S. veterinary schools accredited by AVMA.

If you love animals but need a quicker career path, there are also 131 AVMA-accredited veterinary technology programs across the U.S. To view a list of programs, go to [www.avma.org](http://www.avma.org) and click "A career in veterinary technology" under the "Careers" bar.

### Follow your species

Students should look for schools that show enthusiasm for their primary species of interest, recommends Geoff Dahl, chairman of the University of Florida (UF) animal sciences department.

In most cases, state colleges focus on the livestock species and management systems commonly used in that area. UF, for example, tailors its programs to fit the conditions and climate of its home state.

"Florida is primarily a forage-producing state, so we focus on species of livestock that consume forages," Dahl says.

UF professors and researchers also take advantage of the state's unique environment. Many research programs focus on tropical and subtropical environments. The meat science department is well-respected, especially for its studies on beef tenderness associated with the Brahman-influenced cattle raised in hot regions.

UF has also long attracted students from Central and South America. Those ties have strengthened with the increase of beef production in Latin America.

### Final decision

Once you've narrowed your choice down to a few colleges, contact these schools and talk to a recruiter about new programs. You may discover an innovative course of study that beckons you to that school.

## Rankings

The deans and professors we talked with say there's no reliable ranking system that helps students interested in agriculture and animal science choose a college.

*U.S. News and World Report* includes many universities with schools of agriculture in its 2007 college rankings. Overall, the three highest-ranked colleges on the list are Princeton, Harvard and Yale. The highest ranked colleges with animal science majors on the list are Cornell University (12), University of Wisconsin-Madison (34), Pennsylvania State University (7), and the University of Florida (47).

The *Chronicle of Higher Education* provides a college ranking system based primarily on faculty scholarly productivity. According to its rankings, the University of Massachusetts is the top animal science institution. The University of Illinois-Urbana, Cornell University, University of California-Davis, and University of Missouri-Columbia round out the top five.

To view the *U.S. News and World Report* web site, visit [www.usnews.com](http://www.usnews.com).

For example, the University of Nebraska-Lincoln (UNL) is launching Beef Education Excellence for the Future (BEEF). In this program, students engage in seminar courses with industry leaders and specialty courses in cow-calf production, feedlot management and meats processing. This undergraduate work builds toward a senior-level beef systems course. An intensive internship in the beef industry is a key component of BEEF.

Even recent graduates of Nebraska probably aren't aware of BEEF, but a unique program such as this could tip the scales for students choosing between several fine colleges.



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