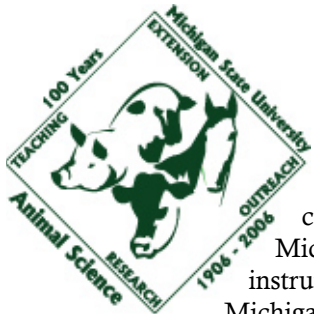




MSU Animal Science Celebrates 100 years



From the use of plow horses to clear timber in the 1850s to the developments in genetic mapping in 2005, and many milestones in between, the contributions of animal science to Michigan State University have been instrumental to the overall success of Michigan State University. While this past year marked the 100-year anniversary of the Animal Science Department, animal agriculture has been a part of the curriculum at MSU since its beginning in 1855.

We asked Dr. Karen Plaut, chairperson of the department, to reflect on how the strides made in animal science over the past 100 years have positioned the MSU animal science department to be one of the leading departments in the country today, and where she envisions the department in the next 100 years. What follows is a question and answer session with Dr. Plaut.

How has the mission of the Animal Science Department evolved over the years?

Certainly the challenges we face are different, but the fundamentals of why we are here haven't changed: getting the strong science-based education along with the practical application.

In 1850, Bela Hubbard, a prominent geologist and farmer from the Hubbard Farms district in Michigan spoke to the legislature in support of forming the Michigan Agricultural College, he said: "Agricultural discovery is not merely on familiarity with farm practice, nor on a willingness to experiment but also on the

knowledge of those fundamental laws of science on which improvement is based...the college must teach agriculture and all the natural sciences...there should be an experimental and model farm to discover practical applications or the precepts taught."

When we read this we see that while so much has changed, nothing has changed – the fundamental principles are the same.

How has the make up of the students changed?

The students have changed dramatically, not just here at MSU, but across the country. Back in the days of the early 1900s everyone came from a farm and now it is a smaller part of the student body that comes from a farm. That has been a pretty dramatic shift. This does change a little bit what we teach. We need to offer more applied opportunities like internships for students to gain the practical experience. Years ago, that was part of the student's background, now we have to help students obtain the experience.

What attracts students to the department today, if they are not from a farm background?

It is really the bond between animals and humans, there is no doubt most of the students are coming because they have an interest in veterinary medicine. The interest in veterinary medicine comes because that is really the only field they think about when they think about their relationship with animals. I think it is our obligation to help them see what all the different kinds of opportunities there are and continue to be. There really are many opportunities available to the students, especially when we think on a global level.

How has the department changed in the way it interacts with producers and the industry?

The one thing I love about Michigan State is that we have a strong relationship with our industry. We have strong partners and that is a strength at Michigan State that you don't see in many other institutions. The relationships have changed over time. In the beginning, they actually organized everything around farmers. Courses and schedules were made to accommodate the farming seasons. Extension courses were brought out to the farmers. Now with technology we can make connections with farmers on different levels.

We have shifted somewhat from training individuals to looking at the bigger picture of training. We are now using multimedia tools that include Web based information, publications, etc. We do a lot of work that we call "training the trainer." It is something we do behind the scenes that many people don't know about. But if we can bring in consultants or veterinarians to a large conference to share knowledge, they in turn take that information back to the producers on an individual level. Using this approach allows us to reach a broader audience, but it is less visible.

We also work to create ways for farmers to help each other through discussion groups and other forums. This has become more popular. We may bring in the experts to help with the issue, but farmers decide what the issues are and use each other's knowledge.

Technology all the way from automobiles through to the Web has changed how we reach farmers. We are now talking about using pod casting to reach 4-H members. We have to continue to adapt new technology as it becomes available.

How do you see the department evolving to meet new industry challenges?

We need to focus on some key areas for the future. Those areas are health, environment, and welfare. Health really starts with healthy animals, healthy foods, and leads to healthy people.

We need to be good stewards of the environment: air, land and water. We need to continue to develop agricultural practices so people view them as environmental friendly. We need to look at ways that we can improve in the welfare area. Social responsibility in the food system is no longer just about how we produce our animals but what consumers think of how we produce our animals. We have to continue to get the message out and use science to inform that message. People are involved in animal agriculture because they like to work with animals and we need to help the world understand how we are continuing to adapt in the area of animal welfare. The bottom line for all these areas is getting the science-based information out to producers so they can

use that information to help make decisions.

Science is the key. There are so many emotions on the issues. We need to help people make decisions based on the science. Those decisions aren't necessarily the same for individuals because each individual looks at it differently, but they need the right body of knowledge to be able to ask the right questions. The important thing is that it is not done at the expense of others. We all have to work together and there is more than one way to get there. That is important and will be more important in the future as we see a society with more diverse sets of values. We need to make sure we don't create divisiveness among those in the industry. We have to work together.

What changes do you see coming in the way extension is used?

We will need more partnerships within the industry. This has been very successful in a number of industries that have developed partnerships with MSU. The potato industry is one of them. There are some others particularly on the crop and vegetable side they have really come to the table to help support some of the more applied positions. Through the partnerships MSU is helping produce the educational programs that farmers need but farmers are right at the table helping to decide what programs they want. These types of partnerships will become more important in animal agriculture.

Certainly the animal industries have rallied around MSU, particularly through the animal initiative and there are many more examples before that all the way back to the formation of cow testing organizations (later DHIA) in the early 1900s.

How does the way research is funded impact the department's research program?

The bottom line when you look at funding to do research is that more partnerships are required. Agencies like USDA will not fund very applied research. They will fund integrated research that has more basic research that can go all the way through to the application. But some of the applied research with here and now answers will require more and more industry partnerships. Some of that will be with specific businesses, some will be the animal industry getting together and doing things. This is true for educational opportunities also. A new example of this is our beef education endowment fund. It was started by the beef industry through the Michigan Cattleman's Association to support purebred beef education and the beef cattle research center to provide opportunities for students that the industry feels are important. This is another way to partner with an industry that we are pretty excited about.