

# Teaching - A Noble Purpose of the University

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In reading these columns each month, one might conclude that the main function of the University of Georgia College of Agricultural and Environmental Sciences was to do research on problems that affect agricultural production in the state. Instead, as Dean Gale Buchanan has emphasized to us, the chief function of our agricultural college is to teach students. In addition, an enormous amount of teaching is done throughout the State by the extension service and at branch station field days and short courses.

Since many of you have sons and daughters in classes at our agricultural college, I would like to share some thoughts with you on a course in "Forage Management and Utilization" that I teach during the winter quarter each year. This course meets daily at the ungodly hour (to some of the students!) of 7:50 am and has in it a high percentage of animal science majors and pre-veterinary students. The course covers a short survey of world grasslands, adaptation and characteristics of major forage grasses and legumes used in Georgia, forage establishment, physiology and ecology, forage quality, hay and silage, forage livestock disorders, grazing management, and forage use for beef cow-calf, beef stockering, dairy, horse, sheep, deer farming, and wildlife production as well as conservation and environmental uses. Our textbook is "Southern Forages" which many of you own and use in your cattle operation.

It has been said that America's future walks through the doors of our schools every day. Thus, it is an awesome task that faces a teacher as one realizes that students in that classroom will be future cattle producers, agribusiness managers, scientists, extension agents, and state legislators. Henry Adams wrote, "A teacher affects eternity: he can never tell where his influence stops".

Teaching a course of any sort is much more than imparting facts, most of which will be forgotten and often will be obsolete in years to come. I like Anatole

France's idea that "The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards." As a teacher, one hopes to attract the interest of the student (this is hard to do with some students!), teach some principles that can be applied to problem solving, show them where they can find facts and detailed information when needed in the future, and open some windows of future opportunity for them.

Students need to see some purpose in learning principles of grassland management so it is desirable to give practical livestock nutritional requirements that can be met with forages. For instance, I find that few of these students really know the nutritional needs of a beef cow at different stages such as post-weaning, calving, breeding, and lactation. When this is understood, then it is easier to see how crude protein and TDN (total digestible nutrients) of hay and pasture at different times of the year affect animal performance. Knowing this, then one can realize the importance of good grazing and hay management to furnish adequate nutrients for the animal in different stages of its development can greatly reduce the requirements for costly feed supplements. Examples via handouts and color slides are used from research and extension in Georgia plus information from other parts of the world when relevant.

Testing should be part of the learning process and not just to give the student a grade. I use a weekly quiz with practical essay-type problem questions, most of which I obtained from extension agents, cattle producers, and our own research. Initially, students find the essay-type problem-oriented questions forbidding and difficult as nearly all university courses are tested with multiple choice, true/false, and fill-in-blank questions. Students are forced to write and this is a new experience. Later in the quarter, students look forward to these interesting problem-oriented questions as they deal with practical situations on the farm. I am

always amazed at the originality of answers coming from some of the better students in a class often giving an excellent answer that is correct but which is quite different from the one I imagined. Essay-type questions are slow to construct and grade but they give a good student the opportunity to exhibit their reasoning power and knowledge of the subject. One continuing problem of many students is their poor ability to use the English language. English is supposed to be the state language of Georgia but in grading quiz papers I sometimes wonder! We desperately need to emphasize better writing in schools if our graduates are to have the communication skills necessary for modern business.

It is a joy to be allowed the privilege of teaching students at the university. We have some very gifted young people who will be leaders in the future. These students deserve the best education we can give them to successfully deal with future challenges in the beef cattle industry. Grasslands are a key part of beef cattle production and well-educated, innovative pasture and hay managers will be even more important in the future.

## SCRIPTURE OF THE MONTH

Can two walk together, except they be agreed?

AMOS 3:3

RICK TORRANCE  
LaGRANGE, GEORGIA