

MANAGEMENT

Changing Consultation to Meet the Needs of Producers

by Hugh Aljoe / hdaljoe@noble.org and Billy Cook / bjcook@noble.org



The Noble Foundation Agricultural Division's consultation program underwent numerous changes between the middle of 2009 and the end of 2010 to improve efficiencies and effectiveness. We have been keenly intent from the beginning on minimizing any disruptions in the services provided or

the previously existing consultant/client relationships. Most of the changes have been internal to the division and not obvious from the outside. Now that the changes are in place, we wanted to share them with you as well as our expectations of how they will benefit you and your operations.

In the summer of 2009, the Agricultural Division completed a strategic plan that described the outcomes we wanted to achieve over the next few years. We based these goals on our analyses of the 2007 Census of Agriculture data for the counties in our 100-mile service area, information from our cooperators (Noble Foundation consultation clients), and the numer-



During 2009 and 2010, the Noble Foundation Agricultural Division evaluated and modified its consultation and educational programs. Although most cooperators probably noticed no difference in the consultation process, the changes will bring greater efficiency to the program and will better meet the evolving needs of regional farmers and ranchers.

ous experiences and observations from both Noble Foundation staff and producers. In brief, some of the goals were to work as one consultation team; better match consultation resources to cooperator needs; and develop targeted educational events based on producer experience level. Once the strategic plan was in place, the division took action.

The first order of business was to create a "one team" approach within the Agricultural Division. Prior to 2009, the Agricultural Division's consultants were divided into four separate teams. Each team was largely responsible for a defined region within the division's 100-mile service area. This "regionalization" permitted strong consultant- ►

cooperator relationships, and it improved efficiencies over our prior practices. However, we observed over time that regionalization required duplicate resources, and it limited important interaction among our consultants.

Always looking for opportunities to improve, we sought a system that would allow our consultants to work more closely together to deliver the best consultation “product” to our cooperators. To advance this new strategy, we pooled the consulting staff into one team. Managers now deploy the appropriate consultants to meet a particular producer’s needs.

With this increased flexibility, we are able to honor all established relationships, allowing producers to continue to work with the consultants they have worked with for years. However, if a producer has specific needs in which other consultants have greater proficiency, our managers have the flexibility to assign additional staff who can better meet those needs. In essence, we view our consultants as a resource pool that will be deployed to meet the specific needs of each producer. If a cooperator has an issue that requires several consultants from the same discipline, the managers can deploy those consultants as needed. This allocation of human resources also extends to the ability of our managers to assign researchers and operations staff to address specific, identified needs of cooperators. Under this new approach, the Agricultural Division’s consultation program can better address the issues of each producer by strategically matching their needs with the strengths and abilities of our entire staff.

Next, to align our consultation services, we needed to fully understand our cooperators and their tangible resources. The consultation

Basic AG

Foundational Knowledge



In response to a growing number of nonagricultural professionals investing in land and becoming involved in agriculture, the Noble Foundation established a new educational program called Basic AG.

teams worked with our cooperators to create a resource inventory. In addition to strengthening our consultant-cooperator relationships, we also were able to make comparisons of our client base to the Census of Agriculture data. Now we can confidently report accurate demographic information for the Noble Foundation service area. For example, our cooperators make up only around 1.9 percent of the region’s producers, but they manage 9.6 percent of the agricultural land and impact about 8.2 percent of the beef cattle in our consultation service area. This is significant. We appreciate the impact our consultation has on the agricultural enterprise of the region.

The next point of our strategic plan was to develop targeted educational events based on producer experience level. We have two programs to illustrate our efforts; these programs address new and beginning agriculturists at one end of the spectrum and commercial producers at the other end.

We are observing that in most of the counties of northern Texas and those along Interstate 35 in southern Oklahoma, the average farm size is decreasing while the number of agricultural producers is increasing. We have also observed that many of these new and begin-

ning producers are nonagricultural professionals that have little or no knowledge of or prior experience in agriculture. These producers have been successful in other walks of life and now want to invest in land and agriculture. We refer to these new farmers as “rural life producers.”

This growing producer sector seeks assistance through consultation and educational opportunities. To address this need, we initiated a new educational program – Basic AG. Basic AG is comprised of Internet-based resources and a series of educational events to specifically address the educational needs of the rural life producer. These educational events communicate fundamental concepts to enhance this segment’s agricultural knowledge, which in turn complements future consultation efforts.

As part of the consultation process with rural life producers, consultants are assigned to address the initial concerns and issues of these producers. This usually requires only one or two specific consultants instead of a full multidisciplinary team. It also allows common interest relationships to become better established between producers and consultants, which often lead to more in-depth consultation in the future. This past year, 80 percent of the new cooperators requesting consulting ▶

Low-input Heifer Development

by Ryan Reuter / rrrreuter@noble.org

services were rural life producers. We expect this trend to continue.

Although we have a growing number of rural life producers, the Agricultural Division still works intensely with a large number of commercial producers – those with more resources or sufficient experience to require more in-depth consultation and education. In fact, slightly more than 50 percent of our cooperators are considered to be commercial producers.

To better meet the challenges of these farmers and ranchers, we started a series of meetings with some of our full-time, highly active commercial cooperators (strategic partners). The goal of these meetings is to better understand the most important issues facing agricultural producers in our region and what the Noble Foundation can do to help them prepare for the future. These meetings will continue and will broaden to include not only active commercial cooperators, but also those who have reduced their agricultural activity in recent years and noncooperator agricultural entities. We expect that these sessions will not only influence activities in our consultation program, but will also influence our educational and outreach programs as well as our research efforts.

As we have often heard, the only thing constant is change. Change has become a constant in the Agricultural Division, but not change for the sake of change. We strive to change only those things that make us stronger and more effective, help the producers and benefit the larger world of agriculture. The Agricultural Division's programs will continue to evolve to meet the needs of agricultural producers today, tomorrow and into the future. ■



The traditional recommendation for developing replacement heifers is to feed them to achieve 65 percent of their mature weight by the beginning of

the breeding season. This recommendation was developed decades ago based upon some research that indicated that almost all heifers would attain puberty by 65 percent of mature weight. However, some recent research may call this long held recommendation into question.

Researchers from Nebraska (Martin et al., 2008. *Journal of Animal Science* 86, p. 451-459) conducted a very interesting study. These researchers fed crossbred heifers to achieve either 55 percent or 50 percent of their mature weight by breeding season. The heifers were exposed to fertile bulls at a ratio of one bull to 25 heifers. The heavier heifers were exposed to bulls for 45 days, while the lighter heifers were exposed for 60 days. Interestingly, there was no difference in conception rate between these two groups – the conception rate was a very acceptable 88 percent. These data would seem to indicate that a target breeding weight of 65 percent may need to be reconsidered in some situations.

Let's take a look at what a reduced target breeding weight can mean. If we assume that mature weight of an example herd of cows is 1,200 pounds, then our 65 percent target breeding weight would be 780 pounds. If we assume we weaned a 450-pound heifer calf at 210 days, then we need this heifer to gain 330 pounds in the next 200 days.

That is 1.65 pounds per day. During the winter, an average daily gain (ADG) this high will likely require good quality pasture or hay and a significant amount of supplement. If we reduced our target to 50 percent, then the required ADG is only 0.75 pounds per day. This gain could likely be achieved by grazing dormant native range with minimal protein supplementation. This low input program would likely reduce expenses and labor requirements. It is also possible that a low input development system would challenge these heifers a little, and the least efficient and least adapted heifers would be eliminated from the herd.

There are a few issues to consider with developing heifers to lighter weights. Obviously, there is a point at which heifers that are too light in weight won't cycle and therefore won't get bred. Secondly, in the Nebraska research, calves born from heifers bred at 50 percent of their mature weight were, on average, seven days younger and 13 pounds lighter than calves born from the 55 percent group. However, the lighter heifers cost an average of \$17 less to develop than the heavier heifers.

Every ranch has a unique set of resources and opportunities. Be sure to put a pencil to the decisions you are making and determine which production practices may pay off in your situation. We may not be ready to recommend that you reduce your heifer breeding weight target based upon this one study, but don't get caught in the trap of doing things the same way just because that is the way you've always done them. ■

New Year's Pasture Resolutions

by David Annis / dcannis@noble.org



A new year!

Each January we make New Year's resolutions with the best of intentions. Of course, we all promise to eat better and exer-

cise more, but have you ever given any thought to making resolutions about your pastures? Let's plan now to practice better pasture management this year. Assuming a good stand of introduced forage (such as bermudagrass), most of our management decisions for pasture forage production revolve around fertilizer, weed control and weather.

Most of us would like to spend the smallest amount of money on our pastures and get the greatest return on our investment. Therefore, let me tell you about a great, money saving secret for pasture fertilization: soil-test and fertilize your pastures according to the soil test recommendations. Rank your pastures according to productivity, and spend your fertilizer dollars on the highest yielding pastures first.

For those of you who apply a 17-17-17 or complete fertilizer each year without having a current soil

test, you may be spending way too much. Why purchase nutrients if your soil is capable of supplying the necessary nutrients to the plants? Soil tests usually run around \$10 to \$15, not counting your time and effort.

As an example, if your soil analysis shows adequate potassium and you've been applying a complete fertilizer all these years, you will save money by not applying this nutrient. That money can be spent on other projects around the ranch or farm.

One of the important parts of the soil test is your yield goal. If you provide a soils consultant with a realistic yield goal for your pastures, they can better determine how much fertilizer to recommend. You'll still need Mother Nature to help you out with timely rain and seasonable temperatures, but you will have done everything in your power to stack the odds in your favor. A word of advice on yield goals: If the pasture has never achieved the yield goal that you write down, you most likely will not achieve your goal no matter how much fertilizer or rain you receive. I also encourage you to use either the Noble Foundation's soil testing service or a university lab for your results and recommendations.

Weed control in late January and early February is another often overlooked decision point. If you have a problem with thistles in your pastures, consider an application of about 1 quart per acre of 2,4-D amine formulation while the thistles are still in the rosette stage. When the thistles are in the rosette stage, they can be easily and inexpensively controlled with 2,4-D. The rosette stage is the vegetative stage of the thistle before it "bolts" or puts up a stem and seed head in the spring. Once the thistles start to bolt, it's all over.

Weather is the most consistently uncertain factor we have in agriculture. We can only say for certain that it will be cold in winter and hot during the summer. Most of us in agriculture are optimists – we believe that we will have an average year with average rainfall. Regardless, you won't get the forage production you expect if you don't have the fertilizer on your pasture when the rain arrives.

In summary, if you haven't had a soil test on a pasture in the past three years, take one. If you have thistles, control them in the very early spring. Finally, have fertilizer on the pasture before the rains come. ■



Managing Risk in Volatile Times

by Dan Childs / mdchilds@noble.org



Agriculture input and commodity prices seemed to be on a rollercoaster during the last few months of 2010, with the inclines being longer and

more sustained than the short dips down. This left general price levels much higher than forecasts of only a few short months ago. How can price predictions miss the mark by so much in such a short time period? From booths at local coffee shops to conference rooms in land grant universities and USDA offices, agricultural producers and industry experts have asked the same question. Possible causes including weather conditions at home and abroad, a weak U.S. dollar supporting exports and the effect of index and hedge fund trading have all been volunteered as causes for the miscalculations. Regardless of the reason for the price swings, agricultural producers must do a better job of managing their production and price risks to remain successful in this volatile environment.

Not so long ago, producers had few options to manage their risks. Limited insurance products existed, and the ones that were available had expensive premiums. Generally, crop insurance products only insured against the risks of production with little opportunity to insure prices. Futures contracts and options on futures contracts were available through commodity exchanges, but the products received little interest from producers. Not much attention was given to seasonal price patterns of inputs because the differences between the peaks

and valleys were very small. As a result, concern was seldom given to managing the price risks of production inputs. When price risk strategies were implemented, only the risk for the commodity or output was considered. Today, locking in only the price of inputs or the price of the output is a recipe for potential failure.

The past few years have seen the addition of many tools to control risk. Several insurance products are now available to insure crop yields and price, forage production, and feeder and fed cattle prices. Premiums for crop insurance are more affordable, especially when production history can be proven. Considerable flexibility exists for insuring forage production as well as cattle prices. Livestock price insurance can be purchased down to a single head of cattle. Futures market information and education is now much more accessible to individual producers. Mini grain contracts of 1,000 bushels rather than the normal 5,000 bushels are also available.

How can these tools be leveraged to help producers manage risks? The first step is for a producer to know their per unit cost of production. Producers need to start with good production and financial records to allow for an accurate calculation of a break-even point. Once the break-even is known, per unit amounts for other items – things such as fixed costs; principal and interest payments; family living expenses; and desired profit – can be added to develop asking prices. After asking prices are determined, a producer can start evaluating different risk management tools to decide which ones fit



their individual preferences and risk tolerance. If certain tools, such as futures contracts or options, are used, upward movements in commodity prices may cause producers to miss out on profits from higher prices. This is common in volatile markets and causes many producers to forego risk management. Ideally, risk managers should develop strategies that enable them to benefit from at least some potential commodity price increases.

Risk management can also be used to protect against unexpected rises in input costs. Seasonal patterns show when prices are typically the lowest and highest of the year. Prices are usually lowest when a particular input is in the least demand, such as fertilizer and feed prices in midsummer. When combined with prudent production practices, students of seasonal price patterns who take action at appropriate times can lower their per unit cost of production.

No one size fits all in risk management tools and strategies. However, diligent study and use of the available tools and strategies can turn volatile markets into good pricing opportunities. ■

Ground Shrinkage

by Ken Gee / klgee@noble.org



At last, the long anticipated time has arrived. It is 7 a.m. on the opening morning of deer season, and expectations are high. A brisk north breeze rustles the

leaves in the trees and sends a shiver down your back. The breaking light begins to peek over the horizon. You slowly move your eyes from side to side, straining to see something that is not there. Then suddenly, out of the corner of your eye, there it is. Movement! A small shot of adrenaline courses through your body as you stare at the spot, but everything seems to blend into the shadows. You continue to stare and finally there it is again.

In the poor light, you can make out the outline of a single animal just inside the timber at the edge of the opening. It is a deer with a relatively large body. It's moving toward a small opening that would afford a shot, but you have not even identified the deer as a buck, much less a buck of the size that you want to harvest. You continue to peer at the deer through your binoculars as it makes its way toward the opening and finally you see them – antlers. It is difficult to tell just how big they are, but through the timber they look impressive.

You exchange the binoculars for your rifle as the buck continues toward the small opening. With your heart pounding, you follow him though your scope. Finally, he clears the timber. He stands broadside as he

holds his nose high, testing the wind. The rising sunlight seems to bounce off his antlers as he turns his head to reveal a spread that protrudes past his ears. Three more steps and he will be back in the timber. It is now or never.

The safety makes an almost inaudible click as the crosshairs settle just behind the shoulder. You lose sight of your target as the recoil jolts your shoulder. Upon recovery, you

sense of relief as you see a white belly gleaming in the tall grass. You got him! Getting still closer, you begin to look for those massive antlers. Slowly you begin to realize that the antlers are really not that massive. He is a nice buck, but his antlers are pretty average.

Most people who have hunted deer any length of time have probably experienced a similar situation.

The phenomenon of "ground shrinkage" can be defined as when a harvested buck turns out to be smaller on the ground than he appeared in life. Following are some thoughts about ground shrinkage.

Deer really do seem to look larger in life. The way they carry themselves, the lighting, the hunter's adrenaline and other factors contribute. Careful observation of the potential target is the best way to avoid harvesting an animal with "undersized" antlers. Snap decisions often

result in ground shrinkage. When in doubt, do not shoot.

If you have done everything by the book and still make a mistake, don't beat yourself up. Take responsibility and strive to be more vigilant next year.

If hunting on managed property with quality or trophy management goals, remember that harvesting the "right" sized animal is not nearly as important as setting conservative buck harvest limits (numbers) and staying within them. For example, if the buck limit is five for a property, buck season should be over when five bucks are harvested, regardless of size. This will help ensure quality hunting in the future. ■



see nothing running off and the tall grass in the vicinity of your target moves for several seconds and then stops. You feel good about your shot, but decide to wait 20 minutes before approaching the spot you last saw the deer. As you wait, you replay the sequence of events in your mind. You remember how he looked those last seconds, almost as if you had taken a photograph. His antlers were tall and wide, shining in the sunlight. He was a magnificent creature.

Twenty minutes later, you unload, lower your rifle and crawl out of your stand. You reload and cautiously approach the spot where you shot the deer. As you get close, you feel a

Clearing Up Some Tall Fescue Misconceptions

by James Rogers / jkrogers@noble.org

This article originally appeared in the Jan. 2008 Ag News and Views newsletter.

One of the major forage research emphasis areas here at the Noble Foundation is developing perennial cool-season grass grazing systems that will take the place of annual cool-season forage systems. The hope is that perennial forage will eliminate the cost of establishing an annual winter pasture and improve margins for stocker producers. Of all the grasses that have been evaluated so far, the greatest strides have been made with tall fescue. Noble Foundation studies looking at tall fescue production, economics of production and management are underway.

Across the nation, tall fescue covers some 35 million acres making it one of the most popular forages in the country. Unfortunately, for many people the mere mention of tall fescue brings an automatic dismissal conjuring up bad experiences with poor animal performance or lack of persistence. There are a lot of negative feelings that need to be overcome before tall fescue becomes an accepted option.

The majority of tall fescue is infected with a fungal endophyte. This fungus lives between the cells of the plant in a symbiotic relationship. The plant provides the endophyte with shelter and nutrients – a place for the fungus to live and reproduce. The endophyte returns the favor by producing alkaloid compounds that provide the plant with insect and drought resistance, grazing tolerance and overall plant persistence. Regrettably, some of the alkaloids produced by an endophyte-infected plant cause

poor animal performance, including low average daily gain (ADG), rough hair coats, elevated body temperatures, etc., and are one reason producers developed a bad taste for tall fescue.

Endophyte-infected plants produce endophyte-infected seed that will produce other endophyte-infected plants. In the field, the only way that the endophyte can travel is through the seed. Researchers found that over time the endophyte can die in the seed, leaving the potential for growing an endophyte-free plant. This discovery led to the release of several endophyte-free varieties of tall fescue in the 1980s and early 1990s. These varieties were thought to be the answer to eliminating poor animal performance of livestock grazing tall fescue, and they were. Sadly, another problem arose – with the elimination of the endophyte, the symbiotic relationship, along with the plant persistence qualities, was lost. While the endophyte-free varieties gave good animal performance, they tended to persist only about five years or less. This left a lot of producers happy with animal performance, but very unhappy with lost stands.

This leads to a new generation of tall fescues. New Zealand researchers isolated naturally occurring endophytes that produced alkaloids associated with insect persistence, but did not produce alkaloids associated with poor animal performance. These “ani-mal-friendly” endophytes are termed “novel.” The first commercial release of novel endophyte-infected tall fescue was the MaxQ® endophyte inserted into the tall fescue variety Jesup and released as Jesup MaxQ. In trials at the Noble Foundation, Jesup

MaxQ has shown greatly increased ADGs and better plant persistence than toxic endophyte-infected Kentucky 31+.

These new tall fescues look to be well adapted to clay-type soils east of I-35. However, west of I-35 where rainfall is lower, the selection for an adapted tall fescue becomes very important. How do we expand the range of tall fescue? A couple of options are being evaluated here at the Noble Foundation. A selection of tall fescue was chosen by plant breeder Andy Hopkins at the Pasture Demonstration Farm west of Ardmore and infected with a novel endophyte. This selection has proven to be better adapted than Jesup MaxQ in trials in our region. It has been planted on cooperator farms and is being evaluated in production environments. Another option is tall fescues that go dormant during the summer and break dormancy in the fall. These types of tall fescues avoid summer droughts and, if production is similar to non-summer-dormant tall fescue, will further help expand the westward range of tall fescue.

These are not the tall fescues of old. They will offer exciting opportunities for grazing managers in the future. ■



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EVENTS

Basic Quicken Workshop

Date: Jan. 18, 2011

Location: Southern Oklahoma Technology Center, Ardmore, Okla.

Time: 8:30 a.m. – 12:00 p.m.

Registration Fee: \$15

Prescribed Burn Workshop

Date: Jan. 25, 2011

Location: Noble Foundation Kruse Auditorium

Time: 8:30 a.m. – 5:00 p.m.

Registration Fee: \$20 which includes lunch

Basic AG Fruit Gardening Seminar, Part 1: Preplanting Considerations

Date: Jan. 27, 2011

Location: Southern Oklahoma Technology Center, Ardmore, Okla.

Time: 7:00 p.m. – 8:30 p.m.

No Registration Fee

For more information or to register, please visit www.noble.org/AgEvents, or call Tracy Cumbie at 580.224.6411. Preregistration is requested.

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