

AG News and Views

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WILDLIFE

Oklahoma and Texas Resources for Feral Hog Control

by Will Moseley / wamoseley@noble.org



Winter is an excellent time to implement control of feral hogs. Natural food sources are usually less abundant during this time so baiting can be more effec-

tive, improving control efforts. The most common control methods are trapping and hunting, both effective ways to reduce the feral hog population. However, finding a good hunting location can be difficult and disposing of live feral hogs can be an issue. For those interested in these types of feral hog recreational opportunities, there are a few resources available for Oklahoma and Texas hunters and trappers.

Oklahoma

The Oklahoma Department of Agriculture, Food and Forestry (ODAFF) has created the Oklahoma Feral Swine Directory to connect landowners wanting control of feral hogs with hunters and trappers interested in providing assistance. Landowners experiencing feral hog problems can complete an application to be added to a listing providing contact information for prospective hunters and trappers. Landowners are listed by county without divulging the location of the property. It is up to the individual landowner



Increasing populations of feral hogs are creating significant land management challenges in Texas and Oklahoma. Both states maintain resources to help land owners, hunters and trappers better understand feral hog issues.

to decide whether or not to allow a specific hunter or trapper onto their property. Landowners can download the application at www.ag.ok.gov/ais/feralswinelandowner.pdf.

Likewise, hunters and trappers can fill out a similar application and be added to a listing that allows landowners to contact them for assistance. Hunters and trappers can

WILDLIFE

download this application at www. ag.ok.gov/ais/feralswinehunter.pdf. Both residents and non-residents of Oklahoma can apply to be on the hunter and trapper listing. It is not necessary for hunters and trappers to be enrolled on this listing to contact landowners enrolled on the previously mentioned landowner listing. For more information on the program and to see a listing of landowners, hunters and trappers already on the Oklahoma Feral Swine Directory, visit www.ag.ok.gov.

Texas

Trapping and selling live feral hogs has the potential for significant revenues. There are, however, laws and regulations controlling live feral hog movement. The Texas Animal Health Commission regulates transportation of live feral hogs in the state. Once trapped, live male feral hogs may be sold to an approved holding facility, approved slaughter facility or authorized hunting preserve. Female feral hogs may only be sold to a holding facility or slaughter facility. Hunting preserves purchasing male feral hogs must be licensed by the Texas Parks and Wildlife Department. For a listing of approved holding facilities in Texas, visit www.tahc.state.tx.us/ animal_health/feral_swine.html. Approved holding facilities are listed by county and include contact information. For approved holding facilities in Oklahoma, contact ODAFF.

Feral hogs pose significant management issues for many landowners in Oklahoma and Texas. The information provided at these websites will help landowners, hunters and trappers control feral hog populations throughout the two states.

LIVESTOCK

Preparing Livestock for Winter

by Clay Wright / jcwright@noble.org

This article originally appeared in the Dec. 2007 Ag News and Views newsletter.

First, we have a tendency to balance winter rations for cows in two phases: non-lactating, in the middle

third of pregnancy (dry); and then post-calving, in peak lactation (wet). Using nutritional requirements for the average weight of the cow herd, it's simple to come up with two feeding regimes; one for before calving and one for after calving. The fact is that in the last third of pregnancy, when the fetus makes 75 percent of its growth, a cow's nutritional requirements increase enough that we need to pay closer attention. During this period, protein and energy needs increase about 40 percent and 20 percent, respectively. For a 1,200-pound cow, that's 0.4 pounds of additional protein and 1.75 pounds of additional energy (TDN). As a result, the ration that maintains weight of a dry cow during the first two-thirds of pregnancy results in weight loss during the last third. If you begin calving in March, it's time to up the supplement.

Second, it's time to plan for inclement weather – the unusually cold, often wet and windy kind that comes through several times each winter. A cow's maintenance requirements are pretty stable down to 32 degrees F. That's her Lower Critical Temperature (LCT) in average body condition with a dry coat. That temperature is based on wind chill, not just ambient temperature. For each degree below 32 F, her energy requirements increase 1 percent. If her hair coat is wet, her LCT is 60 degrees F, and energy requirements go up **2 percent** for each degree below 60 F.

In cold, wet weather, it's possible for energy needs to increase 50 to 100 percent. Often, it's not safe or practical to feed that much more. One alternative is to increase energy intake at lower amounts before, during and immediately after a winter weather event. Allowing access to manmade or natural shelter also can help change the wind chill temperature in our favor. Our whole objective is to maintain body condition score of at least 5.0 prior to, during and after calving so that the herd will cycle and conceive on time for the next "go-around."



2012: Drought Recovery or Drought Persistence?

by James Locke / jmlocke@noble.org



As I write this

month's article in early December 2011, most producers are feeling more optimistic because we have had some rain and it has cooled off. The

100-plus degree days of the past summer are a bad memory. Small grains, although late, are mostly looking good. Ryegrass has taken advantage of open spaces in pastures and is providing hope for high quality early spring grazing. While I do not want to put a damper on your optimism, now is not the time to think you can just go back to routine management. Now is the time to plan for how we will survive if the drought continues or how we will speed up pasture recovery if rainfall returns to "normal" levels.

On the optimistic side, what should be in our drought recovery plan? First, be prepared for an aggressive weed management program. Overgrazed pastures will have open spaces that are likely to be filled with weeds. Identify those weeds and be prepared to control them early so desirable forages have the opportunity to fill those gaps.

Second, maintain proper soil fertility. Good soil fertility, particularly appropriate phosphorus, potassium and pH will favor rapid recovery of perennial forages. Many weeds are superior colonizers of open spaces and do better in low fertility or low pH soils. Aggressive nitrogen fertility is not recommended until perennial forages have recovered enough to utilize it. Applying high amounts of nitrogen too soon will only encourage weeds to be more competitive and further delay pasture recovery. While weed management and soil fertility are always

important, they are even more critical during drought recovery.

Third, be conservative about harvest management and do not completely restock to pre-drought levels. Perennial forages have been through a lot of stress and need to rebuild root systems and carbohydrate reserves. If we either repeatedly graze or hay off all the new growth, perennial forages will not have enough energy for recovery.



Whether the drought subsides or persists, an aggressive weed management program should be implemented in pastures. Unwanted plants, such as these sandburs, will take advantage of soil exposed by the drought.

Fourth, use annual forages to ease pressure on recovering perennial pastures.

On a more pessimistic note, what should be in our drought persistence plan? First, be aggressive on weed management early in the season. Early in the season, weeds have not had time to compete for limited moisture supplies or reduce desirable forage

production. Early season weeds are also easier to control because they have not developed a thick, waxy cuticle on their leaves yet.

Second, maintain phosphorus and potassium levels. If these nutrients are adequate, plants are more efficient with water use and will produce more with less water. Although soil pH or acidity is still critical, lime requires moisture to work. Unless irrigation is available, you can wait until the drought breaks to tackle pH issues.

Third, monitor and be prepared to treat foliage-feeding insects like grasshoppers and armyworms. Those same bare soil areas that are prone to weeds are also excellent egg laying habitat for grasshoppers. This can set the stage for higher than normal populations. The economic threshold for foliage-feeding insects is also lower due to the higher value of the forage they are consuming.

Fourth, maintain a conservative stocking rate and, if necessary, be prepared to destock further.

Fifth, do not open all the gates and let the cattle get whatever they can. Be prepared to utilize a sacrifice pasture for feeding and allow other pastures to recover. The other pastures can be lightly grazed, but keep as much pressure off as possible to prevent long-term damage

Virtually all of Texas and Oklahoma is still in exceptional or extreme drought categories as of early 2012, and the forecast is for those conditions to persist or intensify. While I am not willing to sell out based on a long-term drought forecast, it would be foolish to ignore the possibility. Having a plan for either scenario is simply the wise course. The old saying is true – failure to plan is planning to fail.

Plan Stocking Rate Based on Rainfall

by Hugh Aljoe / hdaljoe@noble.org



Even with the

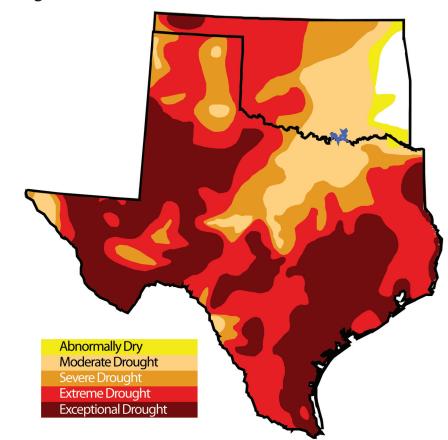
rains during the fall of 2011, much of Oklahoma and Texas is still under drought advisories as we enter 2012. According to the U.S. Drought

Monitor (http://droughtmonitor.unl. edu), much of the region remains under moderate to exceptional drought. Long-term forecasts are not promising for abundant rainfall during the spring or summer of 2012. Climatologists say that we are in a "drier than average trend" and that it could last for several more years. How are cattle producers to plan for the future? What information can they use to make stocking rate decisions? These are the questions that everyone in the industry should be asking.

How do producers plan for the foreseeable future? First, they must know what is expected for both rainfall and forage production of perennial warm-season grasses in order to balance stocking rates with forage production. Forage production is largely dependent on soil moisture, which is a function of rainfall. Surprisingly, the major period in which soil moisture accumulation occurs for production of warm-season grasses (e.g., bermudagrass, old world bluestems and native grass prairies) is during the fall and winter when the grasses are dormant. It is also why we need to be monitoring rainfall early in the year to determine our approach to managing and stocking our warmseason pastures during the next growing season.

South-central Oklahoma rainfall and perennial forage production is shown in Table 1. There are four

Drought Monitor on Dec. 13, 2011



Source: U.S. Drought Monitor

Matthew Rosencrans, NOAA/NWS/NCEP/Climate Prediction Center

http://droughtmonitor.unl.edu

major sections in the table: the 30-year average rainfall (from the U.S. Drought Monitor), monthly rainfall for October 2010 through September 2011, monthly rainfall from October 2011 to December 20 and estimated warm-season perennial grass production. Each rainfall section is divided into three columns: inches per month, cumulative total in inches and cumulative total as a percentage of the 30-year average. Note that the table begins in October; it is the month in south-central Oklahoma and north Texas when warm-season grass production stops and soil

moisture accumulation begins for the next growing season; thus the beginning of the "water year." The last segment indicates the percentage of production expected by warmseason grasses by month and then the cumulative percentage for the growing season.

There are several critical decisionmaking times during the forage production year for warm-season perennial grasses. These points in time are especially important during periods of prolonged drought when a conservative management approach is warranted. The first milestone comes

FORAGE

at the beginning of spring green-up and is based on the moisture conditions for the preceding six months. In an average year, just over 40 percent of the annual rainfall is expected to fall between October and the end of March. However, from October 2010 through September 2011, much of the area received less than 20 percent of its annual average rainfall. By the end of April 2011 when just over 50 percent of the year's rainfall should have occurred since the previous October, the situation was critical and significant recovery of soil moisture within the next month was not probable. At this point, a destocking strategy should have been identified.

The second critical decision-making time is the end of May, when about 30 percent of the warmseason perennial grass production should have occurred. In May 2011, much of south-central Oklahoma received good rainfall, but the total was still only 39 percent of the

30-year average. Under these conditions when rainfall since October is well below the average and forage production is well behind a third of the annual production, destocking should be considered. As a rule of thumb during this period, the percentage that precipitation is behind the average (assuming one is stocked for an average year) is a realistic destocking percentage to be considered. If there is a favorable forecast for precipitation, then destock less; but be prepared to make further stocking adjustments.

The third and most critical decision-making time comes at the end of June when 65 percent of annual forage production and 77 percent of the annual rainfall (since the preceding October) should have occurred. Decisions made now affect the remainder of the growing season and can impact the following years. In 2011, only 40 percent, or half of the expected rainfall, had occurred

by the end of June. Producers who implemented drought management strategies such as destocking and early weaning by the end of June 2011 fared much better than those who did not.

On a final note, for the 12 months ending September 2011, southcentral Oklahoma received 18.98 inches of rainfall – less than half of the 30-year average. How will the growing season of 2012 shape up? The success of the season will be determined by what happens before the growing season begins. So far in this "water year" (beginning in October) with the fall rains, the area is in good condition – but it can change substantially before spring. Monitoring precipitation during this dormant season will help producers make better stocking rate decisions for the next growing season. Develop a table like Table 1 for your own operation. It can be the basis for conservative and informed decisions.

Table 1. South-central Oklahoma Rainfall and Perennial Warm-season Grass Production

	U.S. Drought Monitor			Monthly rainfall			Monthly rainfall			Perennial production	
	cumulative			cumulative			cumulative				cumulative
Month	30 yr avg (inches)	total (inches)	% 30 yr avg (percent)	2010-2011 (inches)	total (inches)	% 30 yr avg (percent)	2011-2012 (inches)	total (inches)	% 30 yr avg (percent)	percent annual	percent annual
October	4.12	4.12	10	1.92	1.92	5	2.07	2.07	5	umidai	annaan
November	2.89	7.01	18	1.48	3.4	9	6.74	8.81	22		
December	2.44	9.45	24	2.03	5.43	14	* 1.96	10.77	27		
January	1.84	11.29	28	0.23	5.66	14					
February	2.2	13.49	34	1.67	7.33	18					
March	3.4	16.89	43	0.26	7.59	19					
April	3.61	20.5	52	2.62	10.21	26				5	5
May	5.47	25.97	65	5.41	15.62	39				25	30
June	4.47	30.44	77	0.3	15.92	40				35	65
July	2.45	32.89	83	0.35	16.27	41				20	85
August	2.52	35.41	89	1.22	17.49	44				10	95
September	4.24	39.65	100	1.49	18.98	48				5	100
	39.65			18.98	*Through Dec. 20, 2011						

ECONOMICS

Exploiting the Financial Fruits of Farm and Ranch Records

by Job Springer / jdspringer@noble.org



The beginning of a new year is the perfect time to analyze your agricultural operation's economic performance. As we close the book on the past year, commodity

and input markets were highly volatile in 2011 and likely created some uncertainty about the actual profitability of your entire farm enterprise. For those who maintained accurate operational production and financial records, the good news is that a great deal of valuable information can be gleaned from them. Below are three areas where the fruits of good recordkeeping efforts can be harvested.

Generating an Income Statement

Reports generated from accounting software such as Ouicken® or Ouick-Books® show the return to each enterprise and the overall operation. The ability to generate an income statement and other reports is the fruit of your accounting labor. With inventories of grain and cattle sold in different years than when they were produced, it is important to create an accrual adjusted income statement. This is the merging of the net worth and income statements to show the true picture of your operation's financial success for the past year. The year over year change in inventories, accounts payable and accounts receivable is added to the income statement.

Management decisions can be made from these reports to improve the operation in the coming year. It is important to analyze each expense category to make sure the figures make sense and see if there are areas that can be improved. After



analyzing your accounting records, it is important to establish a budget covering each enterprise for the new year. Not only is it important to use personal records in establishing a budget, it is also helpful to examine industry averages. Industry averages allow producers to understand where expense categories may be out of line compared to similar operations. Averages for different types of enterprises can be found at: agrisk.tamu.edu/agrisk/beef_cow_calf/information; and www.agmanager.info/kfma.

Understanding Production Levels

It is also important to understand how the production levels of your operation fared in the previous year. Comparing figures to previous years within an operation can help to determine progress. Once again, it is important to know how your operation falls in line with industry averages. The websites mentioned above have actual data from other operations that you can compare to your production data. Knowing where your

operation can improve is the first step to greater success.

Using a Net Worth Statement

Jan. 1 is a great time to develop a snapshot of your assets and liabilities by creating a net worth statement. It is important to know how your net worth changed from the previous year. Year over year changes in the net worth statement reflect the amount of net farm income that was invested back into the operation after meeting family living expenses.

Using the information collected from these three exercises will give you a better understanding of your operation's production performance and subsequent financial success for the previous calendar year. In addition, this knowledge will be useful to identify areas of strengths and weaknesses within your operation and for making production and management decisions for the coming year. Good luck and may the new year be prosperous for you, your family and your operation.

LIVESTOCK

Value of Data Analysis When Receiving Stockers

by Ryan Reuter / rrreuter@noble.org



During the course of conducting grazing research at the Noble Foundation, we routinely receive and "straighten out" stocker cattle. Many of these cattle are

sourced from sale barns and would be considered to be at high risk for contracting bovine respiratory disease (BRD, also known as shipping fever). In the fall of 2006 and 2007, we received 858 such cattle and tracked their performance and cost on an individual animal basis through our receiving program. These cattle averaged 444 pounds when we received them; they came from sale barns in Oklahoma and Texas. Their frames were medium and large with number 1 and number 2 muscle score, and they were predominantly black- or grey-hided. Fifty-one percent of the cattle were bulls when we received them, with the remainder being steers. Nineteen percent of the cattle required dehorning.

We received them over approximately three to four weeks in each year and put them through a standard receiving protocol. The processing protocol included vaccines, implants, body weights, dehorning, etc. We castrated all the bulls, a portion of them by traditional surgical castration and the rest by banding. We also gave all the cattle an injectable antibiotic, half getting Micotil® and half getting Excede®. Following processing, we housed the cattle in a grass trap for approximately 42 days and gave them access to round bales of rye hay and 4 pounds per day of a pelleted feed. We checked the cattle every day and treated sick animals as they were identified.



We discovered several interesting trends in our data set:

- Bulls that were banded gained less than steers (0.44 pounds per day difference), but bulls that were surgically castrated performed similarly to steers.
- 2. Steers that required dehorning gained 0.15 pounds per day less than cattle with no horns.
- There was no gain difference between the two antibiotics.
 Some other observations:
- In 2006, cattle performance was dramatically better than in 2007; but the cattle in 2007 would have made more profit because the cattle market improved during the receiving period.
- Cattle averaged 1.36 pounds per day gain, but individuals ranged from -1.90 to 5.29 pounds per day.
- Total receiving costs averaged \$103.23 per head and ranged from \$63.45 to \$802.95 per head (for one that died).
- Calves that got sick gained 0.70 pounds per day less and cost

- \$33.47 more to receive than calves that did not get sick.
- In our data set, a theoretical "good" animal (i.e., a polled, healthy steer) would be expected to gain 1.65 pounds per day and cost only \$1.12 per pound of gain to manage for 42 days. A theoretical "bad" animal (a horned, banded bull that got sick) would only be expected to gain 0.36 pounds per day and would cost over \$7 per pound of gain to receive!

Using this data, we changed several aspects of our receiving program to make it more cost-effective. Some caution should be used when comparing our results to those from your own management system. Your system and cost structure is likely different than ours and may generate substantially different results. However, we think collecting and analyzing this kind of data is important for stocker producers. It will help you understand your operation better and allow you to make better and more informed management decisions.

CONTENTS

EVENTS

Page 1

Oklahoma and Texas Resources for Feral Hog Control

Page 2

Preparing Livestock for Winter

2012: Drought Recovery or Drought Persistence?

Page 4

Plan Stocking Rate Based on Rainfall

Page 6

Exploiting the Financial Fruits of Farm and Ranch Records

Page 7

Value of Data Analysis When Receiving Stockers

Vegetable Gardening Seminar

Date: Jan. 17, 2012

Location: Noble Foundation Kruse Auditorium

Time: 6:30 p.m.-8:30 p.m. No Registration Fee

Recordkeeping for Agricultural Producers

Date: Jan. 19, 2012

Location: Noble Foundation Kruse Auditorium

Time: 10:30 a.m.-3:30 p.m.

Registration Fee: \$20 - includes lunch

Prescribed Burn Workshop

Date: Jan. 31, 2012

Location: Noble Foundation Kruse Auditorium

Time: 8:30 a.m.-5 p.m.

Registration Fee: \$20 - includes lunch

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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