

AGRICULTURAL DIVISION RESTRUCTURING

New center provides economic information to producers

by Jon T. Biermacher, Ph.D. / jtbiermacher@noble.org



We make decisions every day, and economics play an important role in how we make those decisions. Economic factors help farmers and ranchers deter-

mine how they should approach various land management choices from what crops to plant to when to buy and sell cattle. They also play a role in helping the Noble Foundation determine how to disperse its resources to best fulfill its mission of advancing agriculture.

Generating reliable information about the expected costs and benefits of alternative production systems, management practices and technologies helps producers make more informed decisions about whether or not to adopt them. That's what my role has been at the Noble Foundation for the past 10 years. Now, as part of the Agricultural Division's restructuring process, we have formed the Center for Economic Information and Analysis (CEIA), one of four new centers of excellence. The CEIA exists to support and add value to the Noble Foundation's existing research, consulting, education, outreach and administrative programs and efforts. In advancing



these programs and efforts, the CEIA ultimately strives to help increase the financial, production and overall well-being of farmers, ranchers and landowners.

Alternative systems, practices and technologies are created through the research pipeline here at the Noble Foundation – a pipeline that includes findings from basic fundamental plant

research, plant material created in forage improvement and breeding programs, and production systems developed in on-farm research trials. Once alternative systems are developed and tested for production and technical feasibility, the CEIA will evaluate them for economic potential at the farm or ranch level. For example, a number of research- ▶

ers here at the Noble Foundation are working to develop sustainable forage systems that will allow cow-calf producers to graze their cattle year-round without the need to purchase and feed expensive hay during the inclement winter months. The CEIA will evaluate these alternative “year-round” forage systems to determine whether or not they will be more economical than the conventional practice of buying and feeding hay.

In addition to the economic assessment of new systems and practices, the CEIA gathers and analyzes data that impacts all areas of the Noble Foundation. It provides an economic perspective to the process of reviewing proposed research programs and identifies current and future resource needs. It provides economic information and analytical support to consultation, outreach and education programs, and it aids the Noble Foundation’s business development decisions, which progress research findings into real-world solutions.

On a broader scale, there are economic challenges that hinder the advancement of production agriculture in the Southern Great Plains. The CEIA will collaborate with outside groups to identify and evaluate these challenges. Collaboration will also be important to the CEIA’s work in co-developing outreach and education programs that help communicate the economics of alternative production systems, practices and techniques; commodity markets; and the current status of the U.S. and world economy to agricultural stakeholders.

Economics is a key component considered in decision making. Understanding the economic factors related to various activities within the Noble Foundation and the broader economic implications affecting agriculture will be critical to supporting the advancement of agriculture. ■

FORAGE
Planning, management promotes year-round grazing
 by James Rogers / jrogers@noble.org

Grazing season is most commonly thought of as grazing during a period of time while the base forage is actively growing. This works great for producers who are seasonal in nature, such as stocker operators who grow winter annual pasture then completely utilize the pasture with stocker calves. However, for a cow-calf producer, thinking this way is very limiting to grazing management. For example, the figure below is the percentage of bermudagrass or nativegrass available for grazing during the growing season. Planned grazing during the growing season only limits grazing management options for the remainder of the year. Grazing managers should not limit their thinking to a season or period in time but rather expand their thinking to planning for multiple seasons and year-round grazing management. As a grazing manager, success is tied to stocking rate or the number of animals grazing an area of land for a period of time. As mentioned previously, cow-calf producers should think of the period of time as a year. Note in Figure 1 that the majority (70 percent) of bermudagrass and nativegrass growth occurs prior to mid-July. This means the amount of forage available for grazing is greatest in spring and early summer. Animal performance is directly tied to forage availability; therefore, animal performance should also be greatest in spring and early summer. For a spring-calving cow herd, it is time for the cow to maximize milk production, add body condition and rebreed. If stocking rate is set too high in an attempt to utilize all of the abundant seasonal spring growth, then there is risk of limiting forage intake and cow performance due to restricting forage availability. Other risks include reducing total persistence, and increasing cow carrying costs due to increased supplementation from reduced forage availability the remainder of the year. For long-term sustainability of both the livestock and the forage base, set a stocking rate based on a time period of a year and the amount of forage the operation can produce in a normal rainfall year. Excess forage will likely be available during the spring, but that can be utilized later in the year. Combine this with a controlled rotational grazing plan. Rotational grazing presents additional forage-management options such as allowing for stockpiling forage for fall grazing. Grazing intensity and dura-

Figure 1
 A line graph showing the percentage of forage available for grazing from January to December for two types of grass: Nativegrass (blue line) and Bermudagrass (green line). The Y-axis is labeled 'Percent forage available for grazing' and ranges from 0 to 30. The X-axis is labeled 'Month' and lists the months from Jan. to Dec. Both grass types show a peak in forage availability in June, with Nativegrass peaking at approximately 25% and Bermudagrass peaking at approximately 22%. Nativegrass availability is generally higher than Bermudagrass availability from March to August, while Bermudagrass availability is higher from September to December.

Ag News and Views

“I just wanted to let you know that I thought highly of James Rogers’ article in Noble’s May newsletter. Lately, it seems I continuously see the soil test/fertilize/weed spray articles that pop up every spring, but nothing that I think is of long-term significance to the evolving rancher and his/her management. This article, even though it is so simple, I thought really hit the nail on the head. I appreciate him taking the time to make a point that I believe many are missing.”

- Michael Vance, Texas

“I’m reaching out to let you know how much I appreciated reading James Rogers’ *Planning, management promotes year-round grazing* article in the May *Ag News & Views*. I’ve worked with producers for years promoting year-round grazing, encouraging them to measure/examine their “true costs” of hay production/stored forage. So when I see an article like his, it makes my day!”

- Bill Hodge, Georgia

FEEDBACK

WE WANT TO HEAR FROM YOU!

Please let us know if you have any questions, comments, compliments or suggestions for our publication.

Email:

feedback@noble.org

SOCIAL MEDIA



www.noble.org



twitter.com/noblefoundation



facebook.com/noblefoundation



linkedin.com/company/noble-foundation



youtube.com/thenoblefoundation



pinterest.com/noblefoundation



instagram.com/noblefoundation

Planning for drought in rain promotes future success

by Hugh Aljoe / hdaljoe@noble.org



One of the most

meaningful quotes from college came from Wayne Hamilton, a range management professor at Texas A&M University.

He said, "The time to

plan for a drought is when it's raining, and the time to plan for rain is during a drought." I can truly appreciate these words of wisdom more today than ever in my career having the recent experiences of both drought (in 2011 and 2012) and surplus rain (flooding) in the spring of 2015. This leads to the questions of "Are we still in a drought or long-term dry spell?" and "Should we be planning for drought or rain?" The short answers to those questions are "Yes," and "Both – drought long-term and good moisture conditions short-term."

If you as a producer living in the Southern Great Plains take any stock into the climate and weather predictions, you are aware of the El Nino/La Nina phenomenon and its effect on our region. We are currently experiencing an El Nino effect, which means our region typically receives above-average rainfall. Many producers in Oklahoma and Texas received their expected yearly rainfall in two months (May and June) this year. It has been a very moist first half of the year, providing much needed recovery of deep soil moisture and pond/lake water. However, due to the excessive rainfall amounts, many producers were not able to benefit in forage production. Although there was abundant rain in the spring, it did not equate to surplus forage. The good news is El Nino conditions are projected to remain with us through

the remainder of the year. There is still a lot of the growing season left to provide recovery from the drought years and build reserves headed into the fall and winter.

There are several management practices that can be implemented to ensure pasture recovery and additional reserves. To enhance native range pastures, defer cattle grazing on these pastures from now until after frost allowing them to stockpile forage to be used as standing hay and to improve plant vigor of the desirable native plants. Introduced pastures can be fertilized in August or early September ahead of a rain event to increase stand vigor, forage production and quality. This is true for both warm-season grasses (bermudagrass, Plains and B-Dahl bluestems, Klein-grass, etc.) and cool-season grasses (fescue). Stockpiled bermudagrass, fall fertilized and left ungrazed until frost, can provide abundant high-quality forage as standing hay for several months in late fall and early winter. If moisture comes early in August, fertilizing for an additional hay crop is another option to build an additional reserve. Winter pasture established

in the early fall using small grains or a forage cropping mixture can provide abundant high-quality grazing for rapid weight gain on growing and poor-conditioned cattle. Regardless of what your need(s) may be for your operation, planning is required to achieve successful outcomes. Early August is the perfect time to plan your fall forage management, especially in a year when El Nino is providing favorable moisture conditions.

A producer with abundant grass at the end of the year has options – build reserves, market surplus for grazing or hay, retain all or a portion of the calf crop, or increase the stock rate. However, I would be careful to increase the stocking rate as the long-term climate predictors still say we are in a long-term dry spell. The recovery our pastures have experienced in 2015 will be of greater benefit in the years to come. Therefore, through planning and good management, achieve the greatest amount of recovery possible this season and obtain the added benefit of a forage reserve this winter and perhaps beyond. As I would expect Mr. Hamilton to say, "Plan now – for both drought and rain." ■



American Pecan Board establishes marketing order

by Charles Rohla, Ph.D. / ctrohla@noble.org



The U.S. pecan industry has remained fairly stagnant over the past 50 years. There has not been much change in crop size from the 1960s to

current production estimates. It is estimated that pecan production in 15 states within the United States currently produce more than 60 percent of the world's pecans.

Over the last 10 years, with the increased interest in pecans worldwide, growers have been planting more pecan trees with hopes of meeting this future demand. Once the new trees start to produce, it will be even more critical for the industry to increase efforts to market and promote pecans. To facilitate the changing face of the industry, individuals working in the pecan industry must maintain a strong, goal-based relationship focused on remediating any challenges the industry may face.

In 2013, after several years of discussion, the American Pecan Board was formed to oversee this endeavor. The board is comprised of pecan stakeholders from across the nation including growers and shellers. For the past two years, the board has met with those involved in the pecan industry at local, state, regional and national levels in order to form a marketing order that encompasses the needs of the pecan industry. From these conversations, a Federal Marketing Order (FMO) was created to benefit the domestic and global pecan market. The FMO will be



important for the industry to increase both international and domestic markets, and it will help grow a sustainable market for pecans.

The FMO will assist the industry and be used to:

- Market and promote pecans to increase demand and prices.
- Gather and publish accurate industry data.
- Coordinate and invest in pecan research, including product development.
- Establish grade, quality and size standards.
- Establish packaging and container standards.

Funding for these activities will be paid for by the pecan industry through assessments of between 1 cent and 3 cents per pound of pecans, depending

upon the category of nuts. In a recent study conducted by Marco Palma, Ph.D., with Texas A&M University, a 2.5 cent investment in marketing will have a benefit of 6.3 cents for improved pecans, and a 1.5 cent investment will return 3.6 cents for native pecans. The FMO will be voted on by qualified growers and will be re-approved every five years. Its implementation and lawful usage will be overseen by the Secretary of Agriculture and the USDA. Monies generated through the assessment will be utilized solely for the benefit of pecans.

If you have any questions or concerns please feel free to contact me. For more information on the American Pecan Board and the Federal Marketing Order go to www.pecanboard.com. ■

Relationship with vet prepares producers for change

by Bryan Nichols / bmnichols@noble.org



Noble Foundation consultants have always encouraged producers to have relationships with their local veterinarians. A veterinarian-client-patient relationship (VCPR) is necessary so the best decisions and practices can be put in place to maintain a healthy herd. Key elements of a VCPR include that the veterinarian engage with the client (i.e., the producer or caretaker) to assume responsibility for making clinical judgments about patient (i.e., animal) health, have sufficient knowledge of the animal by conducting examinations and/or visits to the facility where the animal is managed, and provide any necessary follow-up evaluation or care. Also included in this relationship is an agreement by the client to follow the veterinarian's instructions.

Most producers are probably aware of the need for a VCPR since it is already required to purchase certain medications. However, many medications have been available over the counter for use by producers as a means of therapeutic treatment and growth promotion. Much of this is changing. On June 3, 2015, the Veterinary Feed Directive (VFD) final rule was issued. This includes Guidance 213, which was finalized in December 2013. Guidance 213 gives detailed information regarding the definition of "medically important" antibiotics, a process for updating product labels and the data required for companies to obtain approval of any new therapeutic uses. The important date to remember is **Jan. 1, 2017**. This is the deadline by which drug sponsors

must withdraw approved production uses, and veterinary oversight will be required for drugs that are deemed "medically important." Remember, the label is the law. Regarding a VFD, not even a veterinarian is allowed to prescribe extra-label use of an in-feed antibiotic. An example of this is chlortetracycline (CTC). In the past, CTC has been labeled for increased rate of weight gain and improved feed efficiency, and it could be purchased without a veterinarian's consent. It is widely used in mineral mixes. As soon as the label is changed, with the deadline date being Jan. 1, 2017, CTC can no longer be used for growth promotion; its in-feed use for therapeutic purposes, such as anaplasmosis, will have to be authorized by a veterinarian through a VFD. Chlortetracycline is just one example. Ask your veterinarian about others that

may affect your operation.

It is important to note that ionophores are not included as a medically important antibiotic. Ionophores are classified as a polyether antibiotic, but they are not used in human medicine. A veterinary feed directive will not be necessary to purchase ionophores unless they are being used in combination with another antibiotic that is deemed medically important, such as CTC and lasalocid (Bovatec).

A veterinarian-client-patient relationship is more important now than ever before. A veterinarian should be and will have to be your main source of information regarding use of antibiotics. If you do not currently have a VCPR with a local veterinarian or are not sure if you do, start the conversation. Get to know your veterinarian. ■



Weather damage raises tax implications

by Dan Childs / mdchilds@noble.org



Many landowners in Oklahoma and Texas have experienced varying degrees of damage from weather events this spring and summer. Destruction

has come in many ways. Winds have damaged or demolished buildings. Flooding has flattened fences by piling up debris. Rock and gravel on internal roads have disappeared while ruts remained due to travel during wet conditions. Landowners making repairs and rebuilding will incur cost. How will these be reported on the 2015 tax return?

There are basically two ways to report expenses as a result of damage. The two ways are 1) expenses incurred on tangible property in carrying on a trade or business are capitalized or deducted as a repair or 2) report the damage as a casualty. In order to deduct as a casualty, there has to be a basis in the asset. Also, if insurance proceeds are received, many times a gain results rather than a loss. For purposes of this article only expenses incurred on tangible property will be discussed.

If an expense qualifies as a repair, it is reported on the repair line on the bottom of the Schedule F form of the tax return if you have a farming business. The Internal Revenue Service (IRS) will generally allow this categorization if the expense did not result in a betterment or an adaptation of the property to a new or different use. In the case of a fence, if a landowner had to hire labor and/or equipment to clean debris from a fence then buy posts and wire to rebuild the fence, all the expenditures

will likely be deductible as labor, machine hire or repairs in the year incurred if the fence serves the same purpose after as it did before.

However, a landowner may decide that they want a better water gap. Every time a big rain comes, they have to deal with trying to fix the hole before the cattle find it. They know that good fences make good neighbors, and they want to be a good neighbor. So the landowner takes this opportunity to build a water gap that withstands greater water flow and keeps the cattle in without reoccurring attention and expense. In this case, the expenditures would have to be capitalized and depreciated because they improved the existing water gap.

As a sidebar, it should be mentioned that the IRS code section 179 expensing election is still available. This election allows a taxpayer to expense or deduct expenditures in the year incurred that would normally be capitalized and recovered over a period of years through depreciation. Farmers, ranchers and business owners have been allowed to elect

up to a maximum of \$500,000 in one year. However, that amount expired at the end of 2014 and the maximum for 2015 is \$25,000. That is, unless Congress decides to pass an extenders bill, as they did last December, to increase the amount. The new improved water gap and many other items such as breeding stock, tractors and equipment are eligible for the Section 179 election.

Expenditures used to hire machinery and purchase rock or gravel to repair the internal roads would be deductible in the year incurred as long as the roads were similar after as they were before.

The IRS provides de minimis safe harbor exceptions to the capitalization rules for eligible taxpayers. The IRS has issued several regulations in 2013 and 2014 to help clarify, simplify and refine, as well as to create several new safe harbors.

These are general rules that apply, however, every taxpayer is unique and has their own individual situation. It is a good idea for each affected landowner to seek council from his or her tax preparer. ■



Depth, watershed considerations guide pond design

by Mike Porter / mdporter@noble.org



Before constructing a new pond that is filled by rain runoff, the most important considerations are soil properties at the pond site, watershed acreage and characteristics (watershed is the area that captures or collects rain runoff for a pond), goals for the pond, and water depth. This article focuses on two considerations: depth and watershed.

Depth

Pond goals such as sport fishing and year-round livestock water supply require adequate pond depth to supply dependable water during drought. Adequate depth varies depending on where a pond is located, its surface area to water volume relationship, desired life of the pond, how well its water volume is matched to its watershed size, seepage and, to a lesser extent, some other issues. Water depth that provides dependable water during a single year can be as shallow as 6 feet in southeast Oklahoma or as deep as 12 feet in extreme western Oklahoma. However, additional depth is needed to provide dependable water during multiyear drought conditions. In south-central Oklahoma, a sport fishing or year-round livestock water supply pond should be deeper than 8 feet to provide dependable water. Over the last 35 years, all ponds on Noble Foundation properties in Carter and Love counties, Oklahoma, that were filled

by rainfall runoff and were shallower than 7 feet deep did not maintain enough water during some droughts to provide year-round livestock water or support sport fisheries without restocking, and they dried up at least once during the 35-year period.

A pond with a large surface area relative to its water volume tends to evaporate more water and become low or dry up more easily. It is good idea to construct a relatively deep spot in the basin of such a pond to ensure a dependable water supply. Adequate depth in well-designed ponds can be inadequate in ponds with small watersheds or seepage issues.

All ponds become shallower after construction. The rate that a pond silts in depends on watershed characteristics and inflow volume. Ponds with tilled or eroding watersheds usually silt in faster than ponds with well-vegetated watersheds. We monitored siltation rates of 40 ponds in Carter County, Oklahoma, for six to 22 years (36 ponds were monitored for a minimum of 17 years). Average siltation rate was 0.1 foot per year but ranged from 0.02 to 0.37 foot per year. If a manager wants a pond to last many years, adequate depth must be created during construction to allow for siltation over time.

Watershed

A pond that is filled by rainfall runoff should be designed so its water volume is matched appropriately to its watershed area. A pond with water volume too large for its watershed tends to have low water levels during

normal and below-average rainfall periods. Alternatively, a pond with a relatively small volume relative to its watershed requires larger and more expensive dams and spillways, or it tends to have erosion and stability problems with these structures due to excessive overflows. Spillway sizes must be matched to watershed sizes. Unfortunately, many pond owners learn this lesson the hard way during periods with abundant rainfall. Also, ponds with small volumes relative to their watersheds tend to lose excessive portions of their fisheries during frequent and large volume overflows.

The appropriate pond volume for a watershed acreage depends primarily on where a pond is located and secondarily on watershed soil, vegetation and slope characteristics. A pond in extreme eastern Oklahoma might need only 2 acres of watershed per acre-foot of pond volume, whereas a pond in the extreme western Oklahoma Panhandle might need 75 acres of watershed per acre-foot of pond volume. Ponds close to Ardmore, Oklahoma, generally need 8 to 16 acres of watershed per acre-foot of pond volume. Ponds with watersheds having sandy soils, abundant vegetative cover and slight slopes need larger watersheds than ponds with watersheds having clay soils, minimal vegetative cover and steep slopes. More information about matching pond volume, spillways and dams to watershed characteristics is available in the USDA Natural Resources Conservation Service Agricultural Handbook Number 590. ■

CONTENTS

Page 1

New center provides economic information to producers

Page 2

Letters to the editor

Page 3

Planning for drought in rain promotes future success

Page 4

American Pecan Board establishes marketing order

Page 5

Relationship with vet prepares producers for change

Page 6

Weather damage raises tax implications

Page 7

Depth, watershed considerations guide pond design

EVENTS

Fall Cattle Seminar

Time: 1-5 p.m.

Date: Aug. 25, 2015

Location: Southern Okla. Tech. Center, 2610 Sam Noble Pkwy, Ardmore, Oklahoma

No Registration Fee

Integrity Beef Meeting

Time: 5:30-8 p.m.

Date: Aug. 25, 2015

Location: Noble Foundation Pavilion

Registration Fee: \$20 for nonmembers



For more information or to register, please visit www.noble.org/agevents or call Maggie Scott at 580.224.6375. Preregistration is requested.

Contents ©2015, The Samuel Roberts Noble Foundation Inc.

Ag News and Views is published monthly by the Agricultural Division of The Samuel Roberts Noble Foundation. Current and past editions of *Ag News and Views* are available at www.noble.org/ag/news-views/. Free subscriptions delivered by email are available at www.noble.org/ag/news-views/sign-up/. The Noble Foundation encourages the republication of *Ag News and Views* articles. For publication guidelines, contact J. Adam Calaway, director of communications, at jacalaway@noble.org. High quality electronic versions of photos and graphics are available.

Address Service Requested

THE SAMUEL ROBERTS
NOBLE
FOUNDATION
2510 Sam Noble Parkway
Ardmore, Oklahoma 73401
Phone: 580.223.5810

Non-Profit Org
U.S. Postage
PAID
Permit No 2000
Okla. City, OK