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# NOBLENEWS&VIEWS

MANAGEMENT

## Steps to Creating a Successful Ranch Management Plan

by Hugh Aljoe, director of producer relations | hdaljoe@noble.org



hat is intentional management? It might be easier to describe what it is not than to describe what it is. In an attempt at "tongue-in-cheek" humor, let me describe what intentional management is not. You might not be managing intentionally if:

• Your record-keeping system is a shoe box or a file folder in which you keep receipts until tax time.

Your marketing plan is to sell the largest calves each time you pen the herd, weaning the calves en route to the sale barn.
Your winter feeding program is to provide cubes a couple of times a week to the herd without knowing the quality of the hay

or standing forage on offer.

 Your stocking rate was set by what the neighbor, your granddad or your real estate agent suggested, and you don't adjust it until drought forces you to.

You don't routinely test and analyze your pasture soils, yet you routinely apply
 fertilizer.
 Story continues on next page



I'm sure you can think of other examples of how we as producers too often go about "running" cattle with little forethought and planning. In favorable years, we can get by easily enough, but in unfavorable years (due to weather, markets or other issues), difficulties arise. These unanticipated surprises can be costly and often difficult to overcome. Hopefully, most of us learn from our mistakes and failures and, if we survive, can laugh at them in hindsight. The secret is to fail early, fail often, but fail cheaply – and adapt our management so that we do not repeat our mistakes.

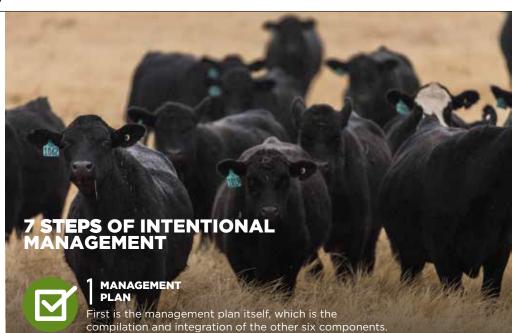
#### MANAGE WITH INTENT

Intentional management is the active management of the collective components of an operation toward the achievement of realistic, well-defined goals. It is a holistic and forward-focused management approach in which an operational management plan is created and used as a template to plan and prioritize activities then to monitor and measure progress toward defined production and economic objectives. Management plans need to be built to complement the resources of the operation - the land, facilities, personnel and production system(s) being operated. Even though there is always some uncertainty within an agricultural operation, with a management plan in place, a producer has a road map to guide him or her toward a predetermined outcome. When variations in climate or markets or other surprises occur and force a change of course, having the plan in place helps guide a producer to either continue to navigate toward the original outcome or alter the course toward a new, more realistic or attainable goal, given the circumstances.

#### PLANNING BRINGS CLARITY OF PURPOSE

For intentional management to be more than a concept, it takes forethought. planning and action. The biggest challenge for most producers is getting started. It is much too easy to get caught up in the day-to-day activities of running a cattle ranch or agricultural operation. It is in the intentionality of developing a management plan where clarity of purpose is achieved. This is where a manager establishes a vision of a desired future for the ranch, identifies the key management objectives to be accomplished, devises an action plan that addresses the critical aspects of each management component, and integrates these components into the management plan for the ranch that the entire staff will implement.

The management plan for the current year becomes the template for the following year, with continual fine-tuning and adjustments over time while adapting to the changing industry, market conditions and climate variations that will occur. Through intentional management and use of a management plan, managers are more likely to attain their desired goals, will experience fewer surprises, and are better prepared for the unexpected when it occurs. Then, instead of just laughing at mistakes of the past, we can laugh ourselves all the way to the bank.





#### PASTURE MANAGEMENT

Second is the pasture management plan, which includes the soils, forages and water resources. The management plan is grounded by the pasture management plan, which forms the foundation upon which the other components rest. The pasture management plan is the first component to address in intentional management.



#### 3 STOCKING RATE MANAGEMENT

Third is the stocking rate management plan, which entails the matching of grazing livestock numbers to forage production as well as managing and adapting livestock numbers as forage production changes within and throughout years.



Fourth is the cattle management plan. The cattle management plan includes the breeding, nutrition, health and husbandry aspects of a cattle program, which ideally complements the land resources of the operation.



Fifth is the marketing plan, which leverages the attributes of the cattle and management for optimum economic results. Typically, this means managing the ranch resources so there is an element of flexibility within the stocking rate for retained ownership of calves or other stocker cattle enterprises as well as timing sales with favorable cattle markets and market cycles.



The sixth component is a good record-keeping system for ranch operations. This is a record-keeping system that allows easy tracking and monitoring of critical production and economic information. It also provides managers the ability to conduct enterprise analyses, prepare financial statements, and develop monthly and annual operational reports.



Seventh is a personnel management plan, which allows a manager to intentionally develop the skills and knowledge of ranch staff to build competencies and enhance their value to the operation. A personnel management plan addresses the needs of the operation, from onboarding a new employee to rewarding valued and tenured employees. It also includes performance evaluations. goal-setting sessions, training and professional improvement.

### LIVESTOCK

# Do You Possess the 8 Characteristics of an Intentional Beef Producer?

by Robert Wells, Ph.D., livestock consultant | rswells@noble.org



o be successful, any business person must develop a plan and then devise a strategy on how to work the plan to accomplish desired goals. That's especially important in

the cattle business, where most cow-calf producers would agree that the return on investment on an annual cash basis is typically low.

In order to become and remain profitable, producers must effectively manage the operation by paying close attention to all aspects of the ranch. If this is done correctly, revenue and expenses also will be accounted for. An intentional beef producer is one who takes the business seriously and is willing to go through the process of developing and working a plan for his or her operation. The following is a list of characteristics that successful, intentional producers share. Intentional beef producers:

#### UNDERSTAND THE IMPORTANCE OF RECORD KEEPING.

Find a record-keeping system that works for your individual style, whether a paper ledger or on a computer. The key is to keep records that are meaningful and that you will use to make management decisions. Do not collect data on metrics you will never use, as this creates extra work that will have no measurable outcome you will implement. Keep detailed enough records that you can understand what occurred "once the ink dries" later in time. Identify key production and economic metrics you can use to monitor your operation. Examples of this would be length of calving season and calving distribution, amount of feed/hay/mineral fed, pounds of weaned calf per exposed cow, body condition scores (BCS), pregnancy and calving percentages, weight and prices of all animals sold, and grazing days in each pasture. With the help of the aforementioned parameters, you should monitor inventories of cattle, feed, hay and available pasture forage, as well as production costs and revenue generated.



#### KNOW ANIMAL NUTRITION MANAGEMENT CAN MAKE OR BREAK AN OPERATION.

There is an old saying in the industry that "you can't starve a profit out of a cow." This statement is true and has been reaffirmed many times over. The feeding program can account for 40-60% of the total annual cost of maintaining a cow in most operations. This typically equates to several hundreds of dollars per cow annually. Work with a nutritionist to develop a strategic feeding program where the supplemental feed is designed to complement the quality of the forage base the cow is consuming. For spring-calving cows that are fed hay during winter, feeding the lowest quality hay earlier in the winter makes the most sense. Keep the best quality hay for later in the winter, and incidentally, later in the cow's gestation cycle or early lactation.

Try never to buy hay based strictly on a cost-per-bale basis or to feed on a costper-bag or ton basis. Better quality hay may cost more, but it can dramatically reduce or eliminate the need for supplemental feed. The break-even price of hay is the cost at which you would purchase feed to supplement the low quality feed. If you are in a situation where hay must be provided, feed the best hay possible to reduce the need for additional supplementation. The cheapest option is rarely the right feed for the circumstances.

Many times of the year, the cow is more deficient of energy than protein. Remember, a cow is not as concerned with nutrient percentage or concentration of the feed as much as she is with how many actual ounces or pounds of a nutrient she receives daily to meet her needs. Finally, match the cow's time of highest nutrient requirements - early lactation or around 2 months of calf age - to the time of year when the pastures supply the highest quality and quantity forage of the year. During preconditioning of the calf, balance the cost of gain with the value of gain. In many years, more profit can be made in a 60-day preconditioning program than is realized on the calf coming off the cow.

#### S KNOW WHEN AND HOW TO MARKET CALVES.

Determine the type of animal you will sell and when you will sell it. Will you sell the calf right off the cow or after a preconditioning program? Will you retain further ownership into the feedlot but sell live, or sell on a grid? Do you want to market quality replacement heifers rather than terminal calves? The answers to these questions will provide focus to your program.

Regardless of when or where you market calves, remember that uniformity of calf type, age and weight is typically rewarded by the buyers, as it helps them meet their marketing goals as well. Identify value-based marketing programs such as the Integrity Beef Alliance (www.integritybeef.org) to help you collectively market cattle like a much larger entity. No matter how large your outfit is, it can still benefit from selling in a market that has more cattle that are similar to yours. The goal of feedlots is to fill entire pens which could hold as many as 200-300 head, with very similar cattle. One uniform truckload will only fill a portion of a pen. Remember to give consideration to how you market cull cows and bulls, as they typically can account for up to 15-20% of the annual ranch revenue.

#### HAVE A DEFINED OUTCOME FOR THE RANCH BREEDING PROGRAM.

What type of cattle will you produce? This goes beyond the concept of uniformity previously discussed. Make sure the calving season is as tight as possible, ideally 60 days or less. If you are a commercial producer, consider the value of heterosis and the advantages built into a well-defined and thought-out cross-breeding program. Identify the breeds you will use, and then work to find the right individuals within each breed to reach your goals. Consider breed complementarity, where the characteristics of the two breeds will be synergized in the resulting progeny. A good example of this is Angus x Charolais or Angus x Hereford.



#### HAVE A COMPREHENSIVE HERD HEALTH PROGRAM.

As the cow-calf owner, you have a moral obligation to the animal to set them up for a healthy life. Work with your veterinarian to develop a comprehensive vaccination and herd health program. Remember to consider that the calves will not live their entire lives on your ranch; therefore, they must be vaccinated against the typical diseases they could be exposed to once they leave the ranch. Become Beef Quality Assurance (BQA) trained and certified. By adhering to BQA standards, you are honoring the commitment to develop and market a quality calf. BQA certification also helps develop consumer confidence in beef. Part of BQA is proper nutrition and health of the calf as well as keeping records. The form at bit.ly/ibeef-vaccination-form is a good example of a whole-herd vaccination record. If you do not have documentation, you cannot prove how your cattle were immunized.

#### OPTIMIZE STOCKING RATE AND PASTURE MANAGEMENT

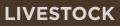
Set a realistic stocking rate for your operation. Visit with a Noble Research Institute consultant, county extension agent, Natural Resources Conservation Service (NRCS) representative or other knowledgeable person for assistance. AN INTENTIONAL GRAZIER WILL RECORD WHEN CATTLE ARE MOVED INTO AND OUT OF EACH PASTURE.

Make sure that the forages in each pasture are provided rest at different times of the year, across years. Monitor rainfall events and understand the concept of effective rainfall. Not all precipitation that falls will lead to increased forage growth. For more information on effective rainfall, go to: www.noble.org/rainfall-effectiveness. An intentional grazier will record when cattle are moved into and out of each pasture. He or she will consider setting up exclosures to help monitor forage disappearance and growth, will use soil tests before fertilizing introduced pastures, and will use prescribed weed and brush control to reduce invasive species encroachment. A cost-effective grazing principle is to use standing dormant forages instead of hay during the dormant season. Cover crops can add a new dynamic to the grazing operation, as well.

#### DEVELOP A RANCH MANAGEMENT CALENDAR.

Begin with the end in mind. Determine when you want to sell your calves and what your end-product will be for most years, and work backward from there to develop the management calendar. The management calendar should include the following dates: bull turn-in and pickup (hence subsequent calving dates), weaning and marketing dates, when to BCS the cows, when to work calves for the initial and booster vaccinations, when to conduct a breeding soundness exam, when to scout for weeds, and when to apply fertilizer and/or lime. Additionally, an intentional producer will develop a plan for when to consider grazing each pasture, all the while recognizing that the exact date will vary based on weather and other uncontrollable factors.

REMAIN FLEXIBLE. Above all else, an intentional producer will learn to be flexible, since so many variables are out of one's control. However, just because intentional producers have developed and are working a plan it does not mean they cannot adjust as the need arises. Conversely, they will be more strategically positioned to make correct and meaningful adjustments to their plan without wrecking their system, largely because of the knowledge gained from well-kept records.



# Signs to Watch When Making Decisions on Stocking Rates

by Brian Hays, pasture and range consultant | kbhays@noble.org



key component of intentional management is the stocking rate management plan. This plan entails the matching of grazing livestock numbers to forage production as well as managing and adapting livestock numbers as forage production

changes within and over years.

So how can a manager determine if the stocking rate should be adjusted during the year? One way is to use an intuitive approach to the assessment, using a producer's own experience, intuition and historical ranch information.

One easy way to do this is to monitor and record the amount and timing of rainfall

events. Rainfall is likely the most limiting factor determining the amount of forage that will be produced during the year. In the southern Great Plains, about 50% of plant growth for the year is usually accumulated by June 15 and 75% of plant growth by July 15. Since rainfall can vary significantly in a given year and from year to year, intentional managers who monitor and record rainfall received will begin to see if they are below or above average throughout the year. A water year table for the operation is a simple means to monitor current year rainfall in relation to the long-term, indicating the variance from average at any given time. Based on their experiences with the land and how their forages respond to rainfall, intentional managers can determine if they should lower stocking rates when rainfall is below normal or if they should stockpile forage or increase animal units if above normal.

Story continues on next page

A WATER YEAR TABLE FOR THE OPERATION IS A SIMPLE MEANS TO MONITOR CURRENT YEAR RAINFALL IN RELATION TO THE LONG-TERM, INDICATING THE VARIANCE FROM AVERAGE AT ANY GIVEN TIME.

#### MORE SIGNS TO MONITOR FOR STOCKING RATE MANAGEMENT

- Bare ground and brush and weed encroachment in the pasture: If these are increasing over time, this could be a result of a too-high stocking rate or not enough rest or recovery time before grazing the pasture again.
- Body condition score (BCS) of cows at critical times: If cattle BCS at calving and weaning are much below 5.0-5.5, stocking rates might need to be reduced.
- · Amount of hay you are feeding, or the need to force cows to "hustle" on range for an extended period over winter: For example, if you planned on feeding hay for three months of the year and it turns out you actually have to feed five months, you are overstocked at least two months-worth of grazing, which comes to 16.67% of the year. The same can be said if cows are forced to "hustle" on range or consume more than the leaf portion of the pastures (leaving little residue and creating bare ground) over the winter. If forced to "hustle" the last two months of winter, then again you are at least 16.67% overstocked.

 Actual forage production throughout the year: This can be done with grazing enclosures, clipping plots or using a grazing stick to measure forage height throughout the growing season. A simple guideline to remember is we never want to graze below a 3- to 4-inch residual height in pastures with introduced forage like bermudagrass, or a

6- to 8-inch residual height in native range. A good resource for setting up tables to monitor rainfall and forage production for the year can be found at www.noble.org/rainfallstocking-decisions. Over several years of monitoring rainfall and vegetative productivity you can refine the stocking rate and better match it to the available forage produced.

Learn more about the intuitive ranch

assessment at www.noble. org/stockingassessment.

The important things to remember are that stocking rates should be determined annually, monitored at least seasonally and adjusted as needed based on rainfall and forage production, while providing planned rest and recovery for each pasture. An intentional manager will graze intentionally, leaving adequate forage residuals at all times to protect the soil surface and improve the water cycle. Such a manager also actively manages the stocking rate by stocking conservatively and adjusting stocking levels according to current rainfall patterns.

#### **STOCKING RATES**

- Are the most important decision a producer makes.
- Should be conservative, flexible and adaptable.
- Can change throughout the year.
- Are set based on amount of forage production.
- Must consider grazeable acres.

Determine if stocking rate should change throughout the year by using an intuitive ranch assessment and monitoring rainfall, vegetative production and animal performance using metrics including:

- Water year rainfall variance from long-term average
- Forage residual heights
- Percent bare ground
- Body condition scores of cows at calving and weaning
- Months of hay feeding over planned, for introduced-pasture ranches
- Months of "hustling" on nativerange-dominated ranches



### WILDLIFE AND FISHERIES

# Where to Find Technical Guidance for Land Management and Conservation

by Steven Smith, wildlife and fisheries consultant | sgsmith@noble.org



f you are a land manager, you probably have encountered issues for which you need more advice than a Google search or a YouTube video can provide. Fortunately, land managers have access to several different nongovernment organizations as well as state and federal entities

to assist them in solving issues from erosion to brush management.

These entities offer a wide range of services, such as consultation both on-site (property visits) and off-site (office, email, text and phone visits); cost-share programs for land management practices; educational materials and programs; and temporary use of equipment. This article gives a brief summary of eight entities that provide technical guidance to land managers focused on natural resources.

#### **NOBLE RESEARCH INSTITUTE**

Noble Research Institute exists to help land managers, with a focus on soil, forage, range and cattle stewardship. We also work with pecans and other crops, wildlife, and more. Even though we are based in Ardmore, Oklahoma, we have national reach, especially involving offsite consultation, research, publications and educational programs. We offer multidisciplinary, integrated onsite and offsite consultation to land managers by providing them with non-biased recommendations to achieve their specific goals. Our mission is to deliver solutions to great agricultural challenges. For more information about us, visit www.noble.org.

#### JOINT VENTURES

Numerous states have joint ventures such as the Oaks and Prairies Joint Venture (OPJV). The OPJV is a nonprofit consortium of partners, including Noble Research Institute, that focuses on the management of upland native grassland plant communities and bird habitat conservation.

The OPJV assists land managers through the **Grassland Restoration** Incentive Program. "OPJV partnerships' Grassland **Restoration Incentive** Program (GRIP) is a multiorganization effort aimed at achieving OPJV grassland bird objectives in focus areas throughout the Oaks and Prairies Ecoregion of Texas and Oklahoma. GRIP provides funding in the form of direct payment to landowners as an incentive for conducting approved grassland bird habitat improvement practices on their property."



Oklahoma counties:

- The Cross Timbers Focus Area: Carter, Jefferson, Johnston, Love, Murray and Pontotoc counties
- The Tallgrass Prairie Focus Area: Craig, Nowata, Osage and Pawnee counties.

Texas counties:

- The Texas Rolling Plains Focus Area: Archer, Baylor, Callahan, Clay, Montague, Shackelford, Stephens, and Throckmorton counties
- Northeast Texas OPJV Focus Area: Delta, Fannin, Hunt, Lamar and Red River counties
- Edwards Plateau Focus Area: Edwards, Kinney, Real, Uvalde and Val Verde counties
- Western Navarro Bobwhite Restoration Initiative Focus Area: Ellis and Navarro counties
- Southern Texas OPJV Focus Area: Austin, Colorado, Dewitt, Fayette, Gonzales, Karnes, Lavaca, Washington and Wilson counties

For more information about OPJV, visit www.opjv.org.

#### NATURAL RESOURCES CONSERVATION SERVICE

As the Natural Resources Conservation Service (NRCS) website states: "NRCS conservationists provide technical expertise and conservation planning for farmers, ranchers and forest landowners wanting to make conservation improvements to their land." NRCS is a federal agency with field offices in most counties across the United States. NRCS offers onsite and offsite consultation, educational materials and programs to land managers. They also offer cost-share programs for land management practices such as brush management, fence construction. water development, etc. For more information about NRCS, visit www.nrcs.usda.gov.

#### STATE WILDLIFE/ NATURAL RESOURCE DEPARTMENTS

Every state has an entity focused on wildlife and fisheries management. Depending on the state, onsite and offsite consultation, cost-share programs for land management practices, educational materials and programs are available. Oklahoma and Texas have biologists who assist land managers. Some examples of assistance offered by these departments include deer management (Oklahoma program: bit.ly/odwc-DMA; Texas program: bit.ly/tpwmldp) and the Oklahoma Farm Pond Management programs. These departments partner with other entities such as Noble, NRCS and state extension for educational programs.







#### U.S. FISH AND WILDLIFE SERVICE PARTNERS FOR FISH AND WILDLIFE PROGRAM

According to the website of the U.S. Fish and Wildlife Services (USFWS), "The Partners Program provides technical and financial assistance to private landowners and Tribes who are willing to work with us and other partners on a voluntary basis to help meet the habitat needs of our Federal Trust Species."

USFWS is a federal agency with regional offices in each state across the United States. USFWS offers onsite and offsite consultation, educational materials and programs to land managers as well as cost-share programs for land management practices such as wetland development, habitat restoration, etc. For more information about USFWS and the Partner Program, visit www.fws.gov/partners.



#### STATE COOPERATIVE EXTENSION SERVICE

There is a Cooperative Extension Service in each state charged with helping rural communities with resource management and other issues, with offices housed in courthouses, post offices or federal buildings in every county. Extension personnel develop and deliver educational materials and programs, which are typically based on research in the respective state. Most offices offer offsite consultation, with some also able to provide onsite consultation. Examples of state extension services include the Oklahoma Cooperative Extension Service and Texas A&M AgriLife Extension.



#### PRESCRIBED BURN ASSOCIATIONS

Numerous states are fortunate to have prescribed burn associations. An example of a state burn association is the Oklahoma Prescribed Burn Association (OPBA). The OPBA is an incorporated nonprofit, created to support local burn associations and develop new ones across Oklahoma. OPBA's goals are to increase landowners' capacity to do neighbor-to-neighbor prescribed burns to reduce fuel loads and improve wildlife habitat, while increasing grassland production and enhancing public health and safety of all Oklahomans. Its goal is to provide Oklahoma landowners with access to support, training and equipment to safely implement prescribed fire on their lands.

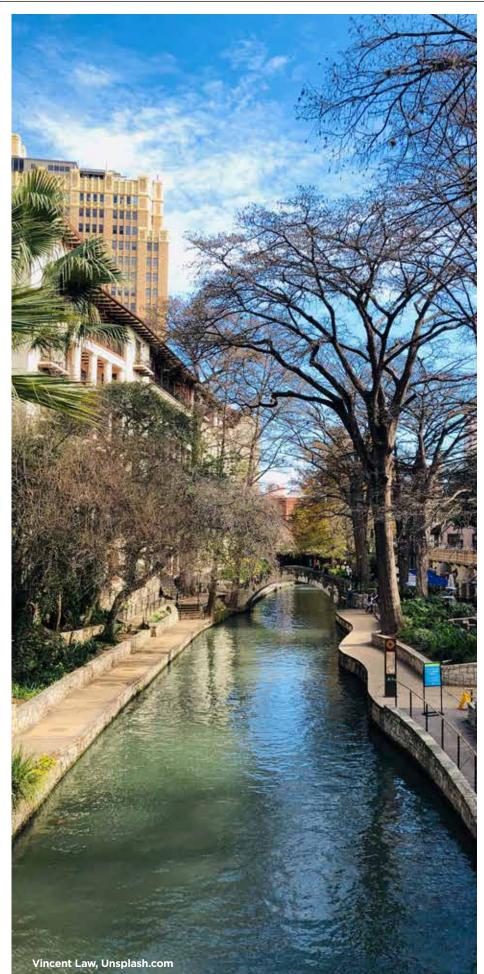
OPBA provides onsite consultation to help plan and implement prescribed burns. Many burn associations offer educational materials and programs and temporary use of equipment for association members. For more information about OPBA, visit www.ok-pba.org.



#### **QUAIL FOREVER**

The Quail Forever website states, "Quail Forever's Farm Bill Biologist program is designed to educate farmers and landowners about the benefits of conservation programs, as well as assist those landowners after programs have been implemented. We call it the 'One Stop Shop' for anything conservation and wildlife-related."

Quail Forever partners with the NRCS, state wildlife departments and other entities to assist land managers improve habitat in the name of upland grassland game birds. Quail Forever offers onsite and offsite consultation as well as educational materials and programs. To find a biologist in your area, visit www.quailforever.org.



## NCBA 2019 Come See Us at NCBA!

Three ways to get to know Noble at this year's conference in San Antonio

by Amy Hays, adult education manager | aehays@noble.org



re you planning to attend the Cattle Industry Convention and National Cattlemen's Beef Association Trade Show this Feb. 5-7, 2020, in San Antonio? If you are, we hope you'll come by and participate with us

three different ways during the week. Better yet, grab a friend or family member, and let us meet them and begin a new relationship with Noble. We are excited to participate in the largest beef cattle industry convention in the nation!



## NCBA CATTLEMEN'S COLLEGE

Intentional Forage Management and Grazing: Planning for Outcomes 8:45-9:45 a.m. Wednesday, Feb. 5, 2020

Cattlemen's College is a learning opportunity during the convention that includes classes on 18 topics, including this one presented by two of our Noble experts. Producers can attend to learn more about specific areas of their enterprise. For more details about attending Cattlemen's College, visit convention.ncba.org/eventsmeetings/cattlemens-college.







Jeff Goodwin, Noble Research Institute conservation stewardship leader and pasture and range consultant, will talk about planned management and grazing of native rangelands to enhance soil health, ecosystem functions and plant productivity within the beef production system.

Hugh Aljoe, Noble Research Institute director of producer relations and pasture and range consultant, will discuss planning and application of forage management related to introduced pastures to intentionally extend the grazing season of a beef production system. He will provide grazing options such as annual cover crops, forage diversification, and stockpiling of perennial and annual forages in complement to beef production systems.

Goodwin and Aljoe will look at the cost benefit of management practices to operations, identifying additional opportunities to enhance production and grazing, and how to extend forage grazing based on different seasons and cattle production needs.

#### NCBA TRADE SHOW FLOOR Booth #1451

Come spend a little time with us at the NCBA trade show and catch up with our consultants, discover some new resources we have to share or just come by to say "hi." If you have not already set up your new online Noble account, we can help you. Feel free to bring by someone new; we'd love to meet them. The trade show opens early Wednesday evening and runs through Friday afternoon.

## NCBA LEARNING

#### 3-2-1: Building Proficiency in Pasture Management

9:30 a.m. Friday, Feb. 7, 2020 In the NCBA Learning Lounge, Noble Research Institute will bring a formula to help you assess, plan and execute ways to build proficiency in pasture management. What are three things you should be doing right now? What are two things you can focus on during the coming year? What is one thing you should not pass up knowing? Join Hugh Aljoe, director of producer relations and pasture and range consultant, and other members of Noble's consultation team as we discuss how you can become more intentional in your pasture management. Noble Research Institute focuses on land stewardship in beef cattle production with producer profitability. 🐜

## NOBLE News&views

#### IN THIS ISSUE



#### FEB. 25

#### Managing Crops in Hoop Houses

#### 6:30-8:30 p.m. Kruse Auditorium, Entry 5 No Registration Fee

Specialty crop growers worldwide continue to adopt high tunnel hoop houses because they provide an element of environmental control not possible with field production. During this course, you will learn how to manage the growing environment unique to hoop houses to produce high yielding, high quality crops.

#### MARCH 26

#### Managing Weeds and Insects in Your Pastures

#### 1:30-5 p.m. Kruse Auditorium, Entry 5 No Registration Fee

Pasture and hayfield managers face many challenges from factors over which they have no control. They do, however, have some measure of control over weeds and insects. There are many different approaches to pest management, and each producer must select the approach, or combination of approaches, that best align with his or her own philosophy.

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## **UPCOMING EVENTS**

**Preregistration is requested. Registration fees for paid events will increase by \$10 one week before the event.** For more information or to register, visit www.noble.org/events. For other agricultural questions, please call our Ag Helpline at 580-224-6500.



Come learn about eastern bluebirds, and other cavity-nesting songbirds, and how to build, place and manage their nest boxes. You will build a nest box that you can take home. You should also have the opportunity to view actual bluebird nesting activity in nest boxes.

4:30-7:30 p.m. Protected Ag Demo Area, Entry 2 Registration Fee: \$25



Selecting and Developing Bulls 9 a.m.-3:30 p.m. Oswalt Ranch Registration Fee: \$25



Beef Quality Assurance Certification 1:30-5 p.m. Kruse Auditorium, Entry 5 No Registration Fee



Hedging to Increase Pecan Production 1-4:30 p.m. Montz Pecan Orchard Wichita Falls, TX No Registration Fee



Richard Mifflin Kleberg, Jr. Lectureship on Grazing Management

> 1:30-5 p.m., Pavilion Registration Fee: \$500