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# THE GRAZE

*A quarterly newsletter with livestock and agronomy updates.*



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## Grazing Systems for Profitable Ranching

BY C. WAYNE HANSELKA, B.J. RAGSDALE AND BARRON RECTOR

For today's rancher to remain in the ranching business, he has to be more efficient in his operation to overcome the "cost price squeeze" of livestock production. Increasing costs force the rancher to risk over-capitalization on each animal unit owned. Profit depends upon the managerial ability of the operator, who must produce livestock and wildlife at the lowest cost through good herd and forage management, combined with sound economic and marketing procedures.

Range forage is the lowest-cost feed available although the quality may be low at times. Deficiencies in quality can be corrected with protein, energy and mineral supplementation. Range forage production is an integral part of profitable ranching, and the quantity and harvest of forage produced are dependent upon knowledge of sound range management.

An estimated 75 percent of the 107 million acres of Texas rangeland produces less than half its potential because of range deterioration resulting from past management, drought, etc. These deteriorated rangelands are characterized by predominance of unpalatable and low-producing forage species and topsoil loss. To improve range condition, desirable forage species must be allowed to reproduce and spread.

A good system of grazing can be defined as one that manipulates animals in order to obtain maximum sustained animal and forage production at a low cost. Grazing systems generally have been designed to improve the vegetation, with plant requirements the basic criteria used in designing them. The benefits to vegetation have been improved plant vigor and production; improved grazing distribution; and improved species composition of the vegetation with more desirable species.

Grazing systems should be designed based on forage plant, livestock and wildlife needs. Grazing is timed so that livestock receive a varied, high quality diet correlated with growth patterns of vegetation. This usually results in more effective maintenance and production per animal unit and for the herd. Therefore, the objectives are to meet the nutritional needs of animals, avoid stress on livestock and reduce supplemental feeding. Additional objectives are to minimize labor costs and improve or maintain habitat for wildlife.

Not all grazing systems achieve both goals of meeting plant and animal requirements. Some favor the plants whereas others favor the livestock and/ or wildlife. An ideal grazing system is one that meets both goals depending upon rancher objectives.

## Decisions

There are basically three approaches to grazing management:

1. Continuous grazing has been the traditional method. This is the constant use of forage in a given area, either throughout the year or during most of the growing period.
2. Deferred rotation systems have been tried and tested in Texas for more than 30 years. In this type of system, half or more of the total land is grazed at any given time. The time a pasture is grazed equals or exceeds the period of rest. These systems have proven effective at providing long term range improvement and high animal performance, especially where combinations of stock can be managed.
3. Short duration grazing (SDG) systems are those in which livestock are concentrated on less than half the total land area and the lengths of deferment periods exceeds the length of grazing periods. These may be "extensive" or "intensive."

Several decisions must be made with respect to grazing management. Under any type of grazing, a rancher must decide on stocking rate, kind and class of animals, pasture size(s), water location and supplement locations.

Deferred rotation and short duration systems require that additional decisions be made before implementation. These include land area per system, number of pastures per system, number of herds per system and grazing cycle (length of rest periods, length of grazing periods).

Under continuous grazing, stocking rate is the only variable the producer can adjust; thus, little flexibility is possible in response to stress periods such as drought. Rotation systems provide more flexibility in regard to stocking rates, stocking density, grazing pressure; and time and frequency of grazing.

## Planned Considerations

No grazing system can compensate for overstocking. Animal numbers must be balanced with forage production. Therefore, light continuous grazing may improve range but cause lower returns per acre than another system. Deferred rotation systems tend to allow the animals to graze more selectively than do the heavy continuous or extensive short duration systems. This results in increased animal performance and a slower rate of range improvement. Extensive short duration systems favor greater perennial plant growth. Depending upon rancher objectives, a short duration system may be implemented to promote more rapid range improvement. Later, after the desired level of improvement is reached, a deferred rotation system or continuous grazing at moderate stocking rate may be substituted to maintain range condition and maximize livestock production.

The specific type of grazing system to choose will depend upon many factors:

1. The system must satisfy the rancher's objectives and meet the needs of livestock and/ or wildlife and the grazing resources. Also, the size of range, number of grazing units, climate, range sites and range condition are important.
2. Physical facilities such as fencing, working pens and water storage should be considered in terms of forage use, livestock distribution and costs/benefits. Increased numbers of livestock per pasture will require additional water supplies.
3. Special provisions for prolonged drought or other unusual circumstances should be included.
4. Sufficient forage reserves to facilitate operations such as breeding, lambing, kidding or calving must be planned for. The numbers and kinds of livestock in grazed pastures can vary to fit the forage and livestock needs.
5. Rest periods should be long enough and at the proper season to accomplish specific management objectives for key forage species, but maintain high forage quality for good livestock nutrition. Grazing period should be short enough to provide adequate animal nutrition but not long enough for animals to graze regrowth before plants recover.
6. All domestic livestock must be removed from pastures being rested.
7. Numbers of wildlife animals should be controlled to prevent overuse of desired plants, provide higher quality diets and improve the animals' performance.
8. The grazing system should be started when there is sufficient forage in the pastures(s) to be grazed.
9. The number of grazing animals and the amount of forage must be kept in balance. Herd size should be flexible.
10. Grazing periods must be alternated during the growing season of the desired plants so that the same units are not used at the same time each year.
11. Stock water must be provided in each grazing unit as needed for the number of stock and the period of grazing expected.
12. Variations from a planned grazing system may be required to meet the needs of plants, livestock, or wildlife. Necessary changes should reflect sound forage and livestock management. A system must be flexible.
13. Records of livestock and wildlife performance and pasture use and condition must be kept.

## Kinds of Systems

Planned use refers to how, when and where the animals are to be grazed. Planned use is based upon the needs and characteristics of the ranching enterprises and is designed to give maximum and efficient use of the forage over the entire ranch. When designed and executed properly, a planned system can improve range and sustain maximum production. Adjustments may be necessary for a particular system to work in a particular livestock and wildlife operations. The rancher is responsible for the success or failure of a planned system. Each system must be flexible enough to adjust to current and expected conditions as well as to changes in ranch objectives.

All systems are based on the main principle of grazing management – controlling the frequency and severity of defoliation of individual plants. The immediate response of an individual plant to grazing may be:

1. increased plant vigor, as evidenced by increased size or reproduction;
2. decreased plant vigor or death; or
3. neither a positive or negative reaction.

The major factor controlling the frequency and severity of defoliation, regardless of the type of grazing system, is grazing pressure (defined as the animal unit, or forage demand, to forage supply ratio). Severity and frequency of defoliation will always increase as grazing pressure increases.

Under continuous grazing schemes stocked with a single class of livestock, grazing pressure can only be manipulated by stocking rate (the number of animals that a given area of range actually supports for a period of 12 months). This is also the case in the deferred rotation systems. However, in these systems a period of rest is periodically scheduled, to ensure that the grazed plants have an opportunity to regain their vigor. Under any short duration grazing system there is much greater control of the frequency and severity of defoliation because the stocking rate, stocking density and length of graze/rest periods can be manipulated to benefit plants or animals.

### **Continuous Grazing**

Since the number of desirable forage species is limited on poor or fair ranges, it is difficult for them to reproduce under year-long grazing pressure, even with very light stocking rates. This is because animals are selective grazers and will graze the palatable species first. With year-long grazing the desirable species are grazed continuously. On ranges in good condition, continuous grazing with moderate stocking rates generally does not harm animal or forage production. Animal production is often more erratic under continuous grazing, but this system generally returns more income/ acre than most other grazing systems.

### **Deferred Grazing**

Removing grazing animals for an adequate period of time gives a desirable plant species an opportunity to regain vigor and reproduce. Deferred grazing can be of several types, any of which can be designed to meet the requirements of both forage plants and grazing animals.

### **Decision Deferment**

Decision deferment is based on adapting the grazing system to specific needs or situations. The deferment usually is for the entire growing season, or for a part of it when moisture conditions are best. Success of this system depends upon the ability of the manager to make a correct decision. Decision deferment is recommended following range seedling and brush control, or in situations where systematic deferment cannot be applied economically.

### **Off and On**

The off-and-on system is a method or rotating deferment based upon forage utilization. The animals are switched from one pasture to another when proper use of the key forage species has been obtained. The duration of grazing is not specific because the time required to obtain proper utilization can vary from year to year and from season to season. Also, the time of deferment is not specific because the animals are not returned to a pasture until the key forage species have regained their vigor and can be grazed without harm.

## SYSTEMATIC DEFERMENT GRAZING PROGRAMS

### Four Pasture Deferred Rotation

This system was developed in 1949 by Dr. Leo B. Merrill at the Texas Agricultural Experiment Station near Sonora, and is known as the "Merrill" system. The four-pasture deferred rotation grazing program is rather simple in design (Fig.1). All four pastures should be about equal in grazing capacity. This is important because overgrazing will be detrimental to the forage and cause the system to fail. The total proper stocking rate of all four pastures is calculated and stock are divided into three herds. Three pastures are then grazed while one is deferred. The deferment seasons should be based on climatic factors, rainfall, growing season, nutritional needs of the livestock and requirements of the range plants.

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Figure 1. It takes 4 years to complete the four-pasture deferred rotation grazing system. Each pasture is grazed 12 months then deferred for 4 months. There are three 16-month grazing cycles.

**Pasture Deferred 1**

July-October, first cycle  
November-February, second cycle  
March-June, third cycle

**Pasture Deferred 2**

November-February, first cycle  
March-June, second cycle  
July-October, third cycle

**Pasture Deferred 3**

March-June, first cycle  
July-October, second cycle  
November-February, third cycle

**Pasture Deferred 4**

March-June, first cycle  
July-October, second cycle  
November-February, third cycle

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### Two-Pasture Deferred Rotation

This system is sometimes called South African Switchback. The two-pasture system is generally satisfactory, but may not give results as good as the four-pasture deferred rotation system. However, the system is superior to year-long grazing.

Two pastures of nearly equal grazing capacity are necessary. The total grazing capacity of both pastures is combined into one herd, so that the herd is rotated between the two pastures. The design of a two-pasture system is given in Figure 2.

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Figure 2. The two-pasture deferred rotation grazing system is completed in 2 years. There are 12-month grazing cycles with staggered grazing and deferment periods occurring in the same year.

**Pasture Deferred 1**

June 16-November 15, first cycle  
November 16-February, second cycle  
March-June 15, third cycle

**Pasture Deferred 2**

March 15-June 15, first cycle  
June 16-November 15, second cycle  
November 16-February third cycle

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The dates and periods of deferment should be selected for the specific area in which the system is to be used. The pasture being grazed should be observed often for signs of excessive overuse or deterioration.

### Seasonal Grazing

Seasonal grazing is less common in the Southwest than in the West and involves grazing in a specific season only, such as spring, fall, summer or winter. Stocker operations may use a winter/ spring grazing season. This type is best used in the Southwest in situations involving both rangeland and tame pastures.

The tame pastures should be grazed during their most productive seasons, while the rangeland is deferred. Such a system can result in highly efficient livestock production at a low cost.

### Short Duration Grazing

Short duration grazing (SDG) has relatively short history in Texas. It is possible to improve range very rapidly with long, frequent rest periods. However, there may be reduced livestock production. There is a continuum in the deferment-grazing cycles of SDC that ranges from short to long grazing periods (Table 1). Extensive SDC is often called “non-selective” grazing. The quality of the livestock diet often declines after they have been in a pasture longer than seven days. Also, the long rest periods allow pastures to accumulate high amounts of cured forage of lower quality. Intensive SDG refers to more rapid rotation with short grazing periods and correspondingly shorter rest periods. The shorter graze period usually improves livestock diet quality through more selective grazing and reduces the possibility that livestock will graze regrowth before a rest period allows recovery.

### High Intensity-Low Frequency Grazing (HILF)

HILF systems concentrate livestock into one herd and allow them to graze a pasture until proper use is obtained. They are then moved to another pasture and the process is repeated. Multiple pastures are necessary so that significant time may elapse before the original pasture is regrazed. In areas of high rainfall and rapid vegetation growth, the length of the rest period may need to be six months or less.

The rancher should determine in which months maximum growth and forage production can be expected, and in which months little growth can be expected. The system should be designed to promote maximum production in all possible pastures during the growing season, and allow for standing forage to remain for use during periods of dormancy.

Several advantages accrue to this type of system. Re-establishment of desirable plants is rapid. Individual animal production is lower than with other systems, but higher stocking rates compensate with a higher return per land area. Emergency feed costs usually are much higher if animal performance is maintained.

Table 1. A continuum exists for lengths of rest and grazing periods in Short Duration Grazing. These should be adjusted according to plant and animal needs, depending on the physical location.

Days of	Intensive SDG		SDG	Extensive SDG (HILF)
Graze	1-3	4-7	7-15	15-30
Rest	30-60		45-90	90-180

Length of grazing period can be calculated by the following formula:

$$\text{Average grazing period} = \frac{\text{Average rest period}}{\text{Number of pastures resting}}$$

### Rapid Rotation SDG

This is a relatively new method of grazing in Texas. In this method the livestock usually are grouped into one herd for each group of pastures, and moved through the system in such a manner that they select a high quality diet, begin in a pasture only a short time; are in a pasture too short a time to overuse plants;

and are off the pasture long enough for the grazed plants to recover enough to withstand another grazing period.

Stock are grazed on pasture from 1 to 145 (usually no more than 5 to 7) days before being moved. An average grazing period is adjusted for each pasture relative to differences in production and size. Pastures are rested from 30 to 90 days (up to 120 days during drought). Longer deferment periods are possible during the dormant season but should not be used during the growing season. The system can utilize existing pastures but may require roundups to rotate the animals.

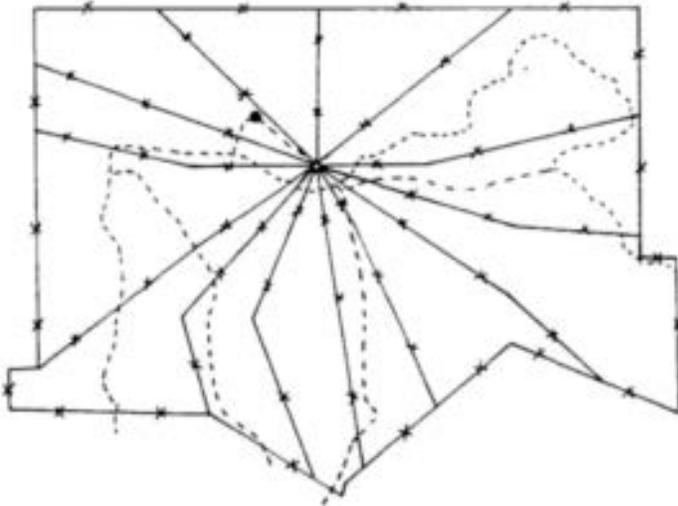
The “cell” system involves fencing that radiates from a central watering and working facility like spokes on a wheel (Fig. 3). This reduces livestock handling stress and the need for developing a water source in each pasture.

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Figure 3. Fence design for a 13-pasture short duration grazing system with water and working pens located in the center. Livestock graze each pasture for a very short period and will return to that pasture less than two months later.

(Average grazing period = 5 days = 60 days rest)

(12 pastures resting)



A planned grazing system is not a “cure-all” for ranching problems. It is a tool for controlling when, where, and how much vegetation is grazed. If the system is adapted to fit ranch operations and to meet objectives, it can boost animal production and provide a sound forage base for livestock and/ or wildlife. A grazing system can benefit plants, livestock and man when the proper stocking rate is used.

Download a printer-friendly version of this publication: [Grazing Systems for Profitable Ranching](#)

# Backyard eggs: Tips for cleaning and storing eggs

Stay safe and get the most out of your hen's eggs

BY ADAM RUSSELL



*Fresh backyard eggs stored in retail cartons. (Texas A&M AgriLife Extension Service photo by Adam Russell)*

It's a good time to talk about food safety, egg handling and storage now that your [backyard flock](#) is laying eggs or getting close to laying, said a [Texas A&M AgriLife Extension Service](#) expert.

Craig Coufal, Ph.D., AgriLife Extension poultry specialist, College Station, said handling, cleaning and storing eggs safely is important to prevent foodborne illnesses related to poultry.

"These are our best recommendations on handling eggs from the nest to storage," he said. "They're meant to prevent cross contamination and preserve egg quality until they're used."

Coufal also produced a [webinar series](#) that provides a full range of information regarding backyard flocks, egg production and information regarding backyard flocks, egg production and recommended egg handling.

## Collect clean eggs

Coufal said clean eggs start in the coop. Remove chicken waste, sanitize roosts and nest boxes, and replace nesting litter regularly.

It's a good idea to prevent hens from roosting in the nest boxes at night, Coufal said, to reduce waste accumulation. Clean out nest boxes regularly to reduce egg contamination. Well-maintained nests also reduce egg breakage.

Collect eggs as soon and often as possible, Coufal said. Prompt collection of eggs reduces the likelihood they will be broken or become dirty.

"Collecting eggs twice a day or once a day at minimum will translate into cleaner, fresher eggs," he said. "The quicker you get those eggs cleaned and stored in the refrigerator the better."

## Cleaning eggs

Eggs are porous and have active bacteria on the outside, so they should not be dipped or soaked in soapy water, Coufal said.

There are many ways to wash an egg, but the temperature of the wash water is the key factor, he said. The wash-water must be warmer than the egg. Avoid using dish soap or scented cleaning solutions as they can affect the eggs' taste.

After washing, eggs should be rinsed with clean water that is slightly warmer than the wash water, he said. The eggs should be allowed to air dry and then stored.

“It’s an easy process that can reduce the chances of foodborne illnesses,” he said.

### **Storing eggs**

Coufal said eggs should be refrigerated as soon as possible. Refrigeration preserves quality and reduces the potential for bacterial growth.

“There is a lot of discussion about room-temperature versus refrigeration,” he said. “Eggs will naturally degrade more rapidly at room temperature. An egg stored at room temperature might be edible for only three weeks compared to 15 weeks if it’s refrigerated.”

Eggs should be stored at or below 45 degrees, he said.

### **Salmonella**

There were 1,134 people infected with outbreak strains of salmonella in 2019, according to the Centers for Disease Prevention and Control. Two deaths were reported, including one in Texas.

The majority of salmonella cases involved contact with chicks or ducklings, but Coufal said handling eggs can also spread the bacteria that naturally occurs in the intestinal tract of chickens.

“Proper sanitation is the best defense from salmonella,” he said. “Washing the eggs and properly washing your hands and any tools used any time you handle eggs, or the chickens, will help prevent contamination.”

## **2020 agricultural custom rates survey now available online**

**BY BLAIR FANNIN**

The [Texas A&M AgriLife Extension Service](#) has made available online the results of the 2020 Texas Agricultural Custom Rates survey of regional and state rates charged for custom agricultural operations.

Information resource provides baseline rates for various services

“Each year, AgriLife Extension receives many requests for prevailing rates for certain kinds of work and custom farm or machine operations,” said Steven Klose, Ph.D., AgriLife Extension economist in College Station. “This is a current update of information that has been used extensively over the years.”

[Current and past custom rate publications](#) are available.

The [online publication](#) is 29 pages. Custom operations include:

- Tractor rental.

- Tillage operation.
- Planting operations.
- Application of fertilizer and chemicals.
- Cotton harvesting.
- Peanut harvesting, including hauling and drying.
- Combining and hauling grains.
- Haying and silage operations.
- Land preparation, brush control.
- Miscellaneous livestock operations.

A survey was distributed to select farmers, ranchers, landowners, as well as custom operators across Texas. In addition, the survey included an online version open to the public. The results help establish a baseline of rates statewide to further assist with questions inquiring about custom-hire activities, Klose said.

“We are very thankful for the people who take the time to complete this survey. Outside of this survey, market information on specific custom work in Texas is very limited to non-existent,” Klose said. “This publication provides a range of rates for different services. It’s an important information resource whether you are providing or hiring custom services in Texas agriculture.”



*Peanut harvest rates are part of the 2020 Texas Agricultural Custom Rates Survey. (Texas A&M AgriLife Extension Service photo)*

## **Brahman-type cattle may require less nitrogen; feeding them accordingly could reduce nitrogen emissions**

Texas A&M AgriLife study to identify differences in nitrogen metabolism between primary cattle subspecies

**BY KAY LEDBETTER**

A recently funded [Texas A&M AgriLife](#) study will determine differences in nitrogen requirements between Brahman type cattle and other cattle. Measuring these differences may allow cattle producers to reduce the protein in cattle diets by allowing for precise diet formulations.

“Implementation of precision diet formulation in cattle diets can be the answer to producing a more affordable beef with a smaller environmental impact,” said Tryon Wickersham, Ph.D., [Texas A&M AgriLife Research](#), scientist and associate professor in the [Department of Animal Science](#) in the Texas A&M College of Agriculture and Life Sciences.

“We believe development of feeding systems that account for differences in cattle type will reduce over and under supplementation, allowing us to optimize growth, reproduction and animal health outcomes.”

Wickersham said. “Additionally, precise feeding systems will reduce the environmental footprint of beef production.”

### Different cattle subspecies, different nutritional needs

Cattle are divided into two subspecies, *Bos taurus taurus*, which generally have no hump and originate from Europe, and *Bos taurus indicus*, generally having a hump and originating in India.

“These cattle were selected under very different conditions and have developed the capacity to thrive under different conditions,” Wickersham said. “These adaptations affect the way they perform and have not been well accounted for in current beef cattle feeding systems, increasing the environmental and economic cost associated with beef production.”



*Ag graduate students, Merritt Drewery and Kyle Weldon, collect duodenal samples from a Brahman steer. (Texas A&M AgriLife photo)*

Wickersham’s study is designed to address the relationship between urea recycling, microbial nitrogen capture and supplementation strategies in both types of cattle consuming low-quality forage.

“Cattle provide a valuable service to society by converting low-quality sources of nutrients such as grasses, crop residues and byproducts into beef, which is a high-quality source of amino acids, minerals and vitamins,” Wickersham said.

“However, there is room to improve the efficiency of this conversion to reduce the environmental effects of beef production and increase consumer access to these vital

nutrients,” he said, “thus allowing more people to consume a diet meeting their requirements.”

### Increasing productivity

“We believe reducing the over provision of protein by 10% potentially reduces nitrogen excretion from cattle by approximately 22 pounds per head per year or 704 million pounds for the U.S. beef industry per year,” Wickersham said. “The potential savings, on a soybean meal-equivalent basis, is \$1.4 billion per year.”

Wickersham’s latest research project, supported by an almost \$500,000 grant from the U.S. Department of Agriculture National Institute for Food and Agriculture, is titled “Enhancing sustainability of beef production by elucidating subspecies differences in urea recycling in response to supplementation.”

“We are doing this research because improper supplementation to cattle has environmental and economic cost, which ultimately decreases the affordability of beef for consumers,” Wickersham said.

### The role of supplements and their effects

Growth, reproduction and health of cattle are affected by the grass and hay they consume — and at times supplements are provided to improve their ability to thrive on their diets, he said.

“Supplements are expensive and represent an increased use of nutrients,” Wickersham said. “By developing feeding systems that account for differences in cattle type, we can reduce the effects of cattle production without compromising the animal’s nutritional status.”

Completion of the proposed project will provide data allowing for precise delivery of supplemental nitrogen for cattle grazing low-quality forage across a wide array of production systems, he said. Capturing data in both subspecies enhances the global utility of these projects for meeting the increasing demand for animal proteins.

Wickersham chose to address the problem of over and underfeeding of protein in cattle diets by elucidating the differences in nitrogen utilization and recycling to improve the capacity to describe urea recycling and microbial capture of recycled nitrogen, both essential to precision diet formulation.

“Ultimately, we believe precision diet formulation will reduce both overfeeding and underfeeding of nitrogen and increase the environmental, economic and social sustainability of beef production,” Wickersham said.

## Reid’s Ram-blings: August 2020

A New Normal

BY REID REDDEN

It is hard to believe that just 4 months ago, our world was turned upside down due to the COVID-19 virus and efforts to stop the spread of the virus. I hope that none whom are reading this article have had serious health complications due to this virus. While, we may agree or disagree with how our local, state, and national government are handling the situation, I think we can all agree that there is no going back to the way things were.

So, this begs the question “What will our new normal look like?” It is a question that I ponder frequently, and I am curious to see how this all unfolds. I am an eternal optimist, maybe one of my faults. Regardless, I believe we are going to look back and wonder why we did not make some of these changes sooner. This new world is forcing us to do things that we thought were impossible before.

It is easy to overlook positive trends when the news is crowded with angst and concern. According to data published online by Bill Thompson, Texas A&M AgriLife Extension Economist in San Angelo, most all classes of sheep and goats are selling well above last year and 5-year averages. Wool and mohair have not fared as well. Likely because they are tied to international trade issues more than the local live animal trade.



## Meat Goat Market 2020

Why has the local sheep and goat markets have remained strong while, other livestock commodities have drop significantly? Did the American consumer wake up to the high quality protein provided by sheep and goats? It will take time for the data on lamb and meat goat consumption to be generated, but I highly doubt much has changed. I tend to think that the secret to the sheep and goat market is diversity.

To be clear, there have been substantial drops in the traditional lamb market due to COVID 19 but most Texas sheep producers do not market to this trade. The non-traditional light weight lamb trade is holding strong and the meat goat trade has exploded.

Now, back to diversity. The non-traditional trade has a diverse consumer base and a diverse supply chain. Whereas, traditional meat industries have consolidated meat packing, processing, and distribution into a few major facilities that are large and highly efficient. When, a mega-packer has to shut down it can send shock waves throughout the industry.

I am not advocating for one or the other. If possible, it would be ideal to have some of both. We need small packers to support the local meat trade. We also need major packers to efficiently supply product from coast-to-coast to complete with imports. But the reality is we need lamb and goat demand to continue to grow so that both small and major packers can get the volume to keep the doors open.

It is estimated that there are a quarter million sheep and goat farms/ranchers in the US. If every person that raised sheep and goats promoted consumption of lamb and goat meat to their friends, family, and local community it would be one of the largest sales forces of any product. In my opinion, we would have a hard time raising enough product to meet the US demand if we took this charge seriously.

If you think I am wrong, I challenge you to one question “Beef: It’s What’s for \_\_\_\_.” Most every farmer and ranchers knows this marketing campaign and they wear it with pride. But American farmers and rancher rarely show the same kind of pride when they promote lamb or goat meat. Why not?

*To provide feedback on this article or request topics for future articles, contact me at reid.redden@ag.tamu.edu or 325-657-7324. For general questions about sheep and goats, contact your local Texas A&M AgriLife Extension Service county office. If they can’t answer your question, they have access to someone who can.*

## Mystery seeds arrive in Texas

Recipients advised to report unsolicited seed shipments

BY KEY LEDBETTER

Texas residents are now among those across the nation receiving mysterious seeds delivered by mail in tiny bags marked as jewelry. U.S. Department of Agriculture officials are on alert because these seeds are unsolicited.



*Mystery seeds with labeling from China. (Source: Washington State Department of Agriculture)*

Kevin Ong, Ph.D., [Texas A&M AgriLife Extension Service](#) plant pathologist and director of the [Texas Plant Disease Diagnostic Laboratory](#) in College Station, said the concern arises because these packages have seeds in them instead of what is listed, and there is no information on what type they might be.

“We don’t know what kind of seeds they are,” Ong said. “Not knowing what the seeds are could potentially open our agriculture industry up to noxious weeds. If that proves to be the case, if they take hold, they could impact agriculture negatively.”

According to [USDA-Animal, Plant Health Inspection Service, APHIS](#), the [Plant Protection and Quarantine](#), PPQ, regulates the importation of plants and plant products under the authority of the Plant Protection Act. PPQ maintains its import program to safeguard U.S. agriculture and natural resources from the risks associated with the entry, establishment or spread of animal and plant pests and noxious weeds. These regulations prohibit or restrict the importation of living plants, plant parts and seeds for propagation.

“Seeds for planting can be produced all over the world and some you buy may come from other countries,” Ong said. “Companies that sell these seeds have the necessary permits. In this situation, the source is not readily known. What USDA wants to know is why are people getting these and are they noxious weeds.”

### **What to do with mystery seeds**

Do not simply discard these seeds as they can potentially germinate and escape into nature, Ong said. All cases should be reported to USDA and all packages should be kept secure until USDA gives further instructions.

All incidences of receipt of these unrequested seeds in Texas should be reported to USDA-APHIS by sending an email to Carol Motloch, USDA-APHIS’ Texas PPQ state operations coordinator, at [carol.m.motloch@usda.gov](mailto:carol.m.motloch@usda.gov). Other states should send emails to [SITCMail@usda.gov](mailto:SITCMail@usda.gov). The email should include a contact email and phone number as well as a description of package information. Sending a photo of the label and material would also be helpful.

“First, if you didn’t order it, we don’t want anyone planting these seeds or even opening the packages,” said Larry Stein, Ph.D., [Texas A&M AgriLife Extension Service](#) horticulturist, Uvalde. “It could be a scam, or it very well could be dangerous.”

“We recommend anyone receiving the seeds send an email to USDA and then wait to see if they are asked to send them in,” Stein said. “We would not advise throwing them away until more information is known because they might contaminate the landfill.”

To date, packages containing these mystery seeds have also been received in Washington, Virginia, Utah, Kansas, Louisiana and Arizona.

Advice from [Texas Department of Agriculture Commissioner](#) Sid Miller is that anyone receiving a foreign package containing seeds should not open it. Keep contents contained in their original sealed package.

“I am urging folks to take this matter seriously,” Miller said in a press release. “An invasive plant species might not sound threatening, but these small invaders could destroy Texas agriculture. TDA has been working closely with USDA to analyze these unknown seeds so we can protect Texas residents.”

An [invasive species](#) is an organism that is not native to a particular region. The introduction of this “alien species” can cause economic or environmental harm. In agriculture, an invasive species can destroy native crops, introduce disease to native plants and may be dangerous for livestock.

Texas A&M AgriLife Extension

# CAPROCK Beef Cattle CONFERENCE

Forage Management and Beef Health

**September 11, 2020**

Floyd County Friends Unity Center  
990 FM 786, Lockney, TX

*Will follow  
social distancing  
guidelines.*

**\$25 ADMISSION | RSVP BY AUGUST 31 (2 PM)**

Early registration is advised. Space is **LIMITED TO FIRST 50**.

RSVP to Mark Carroll at (806) 983-4912 or Andy Hart at (806) 291-5267



**Andy Hart, Ph.D.**

**Hale County Extension  
Agent-AG/NR**

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 806-291-5267

 [amhart@ag.tamu.edu](mailto:amhart@ag.tamu.edu)

 [Hale County Agriculture](#)

 <http://hale.agrilife.org>

 All Ag, All Day  
900 AM KFLP

 **Subscribe!**

## Hale County Ag Committee:

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<b>Chance Crossland</b>	<b>Joe Mustian</b>
<b>Jasper DeVos</b>	<b>John Parkes</b>
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<b>Steven Ebeling</b>	<b>Mark True</b>
<b>Shelly Fuston</b>	<b>Robert Unterkircher</b>

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