**Introduction Sept. 3-9:**

Howdy, my name is Matthew March and I am your new Agriculture and Natural Resources County Extension Agent and I am ecstatic to be given this opportunity to serve the citizens of Polk County. I would like to introduce myself and discuss me experiences in the fields of agriculture and natural resources.

I was born and raised in Rosenberg, Texas which is 40 miles southwest of Houston. I was born into a family that has been farming and ranching in the Rosenberg area for over 100 years. So naturally, I have been around agriculture my whole life. The family operation consists of cow/calf, hay, cotton, and grain sorghum production. I am still actively involved in management and day to day operations of the family farm. I was involved in FFA with my main two areas of focus being livestock judging and raising livestock projects. I raised livestock projects for Fort Bend County Fair and major stock shows. My livestock projects where turkeys, broilers, and goats. I also received my American FFA Degree. I graduated From Texas A&M in 2014 with a B.S. degree in Poultry Science and Wildlife & Fisheries Science with a minor in Rangeland Ecology & Management. While an undergraduate, I worked part time at the Poultry Science Research Farm, where I help conduct research projects and youth poultry programs. Youth poultry programs included poultry judging, outreach, and assisting in youth poultry shows. I was also a member of Texas A&M national champions poultry judging team. I completed my Master’s degree in Natural Resources Development in December 2017 from Texas A&M. My degree plan focused on managing natural resources for both conservation and utilization. For example, many topics examined managing natural resources for livestock production, hunting, wildlife habitat improvement, and conservation.

Upon graduation with my undergraduate degree in May 2014, I went to work for Holmes Foods, a broiler production company, in Gonzales Texas. My position was the Quality Assurance Manager at the feed mill. As the Quality Assurance Manager, I assured incoming feed ingredients met company and nutritional standards. I also, assured finished feed products met nutritional requirements. I then went to work for Texas Parks and Wildlife department in fall of 2014 as a Coastal Fisheries Technician at P.R.B. Marine Fish Hatchery in Palacios, TX. As a technician I assisted in spawning, rearing, and releasing fingerlings of red drum, spotted seatrout, and southern flounder throughout Texas coastal waters to supplement the wild populations. The hatchery I worked at produced between 7-11 million fingerlings per year. I was still working for Texas Parks and Wildlife Department when I accepted my new position as the County Extension Agent.

I hope my education, skills, and experiences can help citizens of Polk County with their agriculture and natural resources questions. If you have any questions feel free to swing by the office or contact me by phone or email.

**Matthew R. March, MNRD**

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**Winter Pastures Sept. 10-16:**

Beef cattle production in Polk County during non-drought years typically does not require producers to provide supplemental forage from spring till the first frost. But, during winter and early spring, majority of are native and improved grasses go into dormancy and don’t provide the nutrition for cattle during the stresses of winter. To address this issue some amount of supplemental forage needs to be provided during winter. Majority of producers provide hay during this time; however winter pastures can provide an economical alternative.

Benefits of winter pastures include decreased feed cost, improved body condition of cattle, and increased calf birthing and weaning weights. Obviously, decreased feed cost stems from producers not needing to purchase and feed hay. But, decreased feed cost can also come from the decreased need to provide supplemental feeds, such as protein licks or range cubes. This is because winter pastures typically provide enough protein for cattle when compared to hay which can be low in protein content especially if the hay was cut during poor growing conditions. The higher protein content and other nutrients found in winter pastures allow for improved body condition of cattle which results in higher calf birthing and weaning weights, thus providing more income for producers.

In East Texas winter pastures can consist of small grain grasses and clover. Small grain grasses typically consist of rye, oats, and wheat. Forage varieties of these small grains focus on producing leaf matter instead of grain, which is important in a cattle operation. There are slight differences between clover, rye, oats, and wheat. These differences include protein content, digestibility, establishment, and winter hardiness. Establishment of winter pastures can be done by either drilling or broadcasting the seed. A prepared seed bed would be best for establishment, but winter pastures can also be established in pastures with other already established summer grasses. Due to summer grasses being dormant when winter pastures are growing there is little to no competition between winter pastures and summer grasses. Now is the time of year to begin planning for winter pastures. Soil testing should be performed now with fertilizing occurring in September-October or approximately thirty days prior to planting. This allows time for the fertilizer to incorporate into the soil prior to planting. Planting can be conducted in late September through early November.

 If you are interested in learning more about winter pastures or wanting to know what type of winter pasture would work for you operation please contact me and I can help answer those questions. We also have the forms to submit your soil for testing at the office and can help with interpreting the results of your soil test.

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**Bermudagrass vs Native Grasses Sept. 17-23**

When it comes to beef cattle forage in East Texas two main standards are Bermudagrass and native grasses. Below are summaries for both of these forage types.

Bermudagrass is a warm season perennial forage that is common in cattle and hay operations throughout southeastern United States. Bermudagrass is a sod forming grass and spreads by stolons (horizontal above ground stems) and rhizomes (underground stems). It is most productive throughout the summer months. Soil moisture and nitrogen are the two most limiting factors in Bermudagrass production. Thus, proper fertilization is essential for a successful Bermudagrass stand. Hybrid varieties have improved productivity, nutrition, and tolerance of a wide range of soil types and pH values when compared to seeded Bermudagrass. However, hybrid varieties unlike seeded Bermuda grass are essential sterile and are only established through sprigging. Sprigging is the process of removing stems from mature Bermudagrass stands and replanting the vegetative cuttings in a different location. Sprigging may not be economical on small acreages. Seeded varieties are Cheyenne, Common, Guymon, Giant, and Wrangler. Some common hybrid varieties are Alicia, Coastal, Jiggs, Tifton 44, Tifton 78, and Tifton 85.

Many livestock and hay producers prefer Bermuda, Bahia, or some other improved grasses in their operation. Producers prefer these kinds of grasses because they produce forage with high nutritional quality. However, native grasses can also be beneficial to a cattle and hay producers when managed properly. Native grasses such as Little Bluestem, Indian Grass, and Switchgrass can provide the necessary forage needed for you livestock. Native grass species are more drought tolerant then improved grasses and do not require fertilization or weed control. Overgrazing is a major concern when managing native grass pastures. The rule of thumb is to take 50 and leave 50. In other words, if more than 50% of the grass is removed detrimental impact to the grass such as decreased root growth will occur. When this occurs native grasses will be replaced by less desired grasses and brush species.

So now that we know some information about Bermudagrass and native grasses for cattle forage how do you decide which one is best for your operation. This will be heavily dependent on your goals for both your cattle production and your land. Bermudagrass will allow for an increased stocking rate however you maintenance cost will be higher due to fertilizer and herbicides. Native grasses can provide for more forage during a drought situation, but in contrast Bermudagrass can be very nutritious for your cattle. Native grasses will benefit both wildlife and cattle production on your property, while Bermudagrass has very little value for wildlife. Lastly, native grasses can easily be overgrazed and be replaced by less desirable grass species so a grazing plan must be developed and followed.

Both Bermudagrass and native grasses can provided the forage for you to have a successfully beef cattle operation. Both have their own unique sets of advantages and disadvantages and a detailed look at your goals will help you determine which is best for your beef herd.

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**Ponds and Waterfowl Sept. 24-30**

With duck hunting season a little over a month away some pond owners may be wondering why waterfowl have not been attracted to their pond during past seasons. In reality, many ponds that are constructed are not ideal habitat for waterfowl. This is because many of these ponds are more suited for fish not for waterfowl. This is because fish and waterfowl have different preferences when it comes to ponds.

Most fish species prefer deeper ponds with open water, while waterfowl prefer shallow ponds with abundant aquatic vegetation. Thus, it is important to determine what the intended use of a pond is before constructing a new pond. If the pond is to be used for fishing it should have deep water, preferable, at least six feet deep. The deeper water allows a refuge of more stable water temperatures for fish during extreme hot and cold temperatures. But, when constructing ponds for waterfowl, the greater shallow water areas the better. This is because most waterfowl forage on the aquatic vegetation that is found in shallow water.

 You can also manage for shallow water and vegetation growth by constructing a drain system such as installing gate valves. Having the ability to manipulate water level will allow you to drain down the water level in late spring or early summer and allow for vegetative growth during the summer. Another popular method is to plant something that will attract waterfowl such as millet. All of these above methods will then need to be flooded prior to hunting season. This can be done by closing the drain system and allow it to either refill from rainfall or pump water into the pond. Some hunters flood vegetation in accordance to what part of hunting season they want to attract birds. For example if wanting to attract teal during teal season you would want your pond to begin to refill in August. However, if wanting to attract birds in January you would aim for a refill date of November-December. Another important aspect to consider is to allow some open water that has none to little vegetative growth which will allow an area for the birds to land.

 Many pond owners would like to have ponds that produce large fish and attract waterfowl. However, this is usually just not the case. I would recommend before constructing a new pond to determine what your intended use is. This way you can design the pond to achieve the goals you want from it.

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