



EXTENSION

Bull Management before the Breeding Season

Parker Henley, Oklahoma State University Extension Livestock

A significant portion of reproductive failures in cow-calf enterprises are due to the fertility of the herd bull. With turnout just around the corner, it's time to focus on your bull battery. Most spring calving cow-calf operations are 30-60 days from the start of the breeding season. There are two major considerations to keep in mind during this pre-turnout period: 1) have a veterinarian conduct a breeding soundness exam (BSE) on all potential herd sires, 2) monitor body condition score and slowly transition the newly purchased young bulls to a grazing setting.

Bull breeding soundness is one of the most economically important traits for cow-calf producers. Thus, a BSE is recommended to measure a bull's potential to achieve satisfactory conception rates. The BSE should include examination of the reproductive anatomy, scrotal measurement, sperm motility, sperm morphology (physical characteristics), locomotion, eyesight and body condition score. A bull that passes the BSE appears to be sound for breeding purposes as best as science can determine at that point in time. Bulls should have a BSE 6-8 weeks prior to turn out. If a bull fails the BSE, this allows producers to have enough time to replace the animal with a sound bull for the breeding season.

Each year cow-calf operations purchase yearling bulls to replace sub-fertile bulls or poor genetics. Many seedstock producers develop bulls on grain-based, high energy diets prior to sale. Because bulls are typically managed to maximize gain and achieve physical characteristics appealing to buyers at a sale, they have the potential to be over-conditioned upon purchase. Bull buyers should consider gradually transitioning their newly purchased bulls to a lower energy, forage-based grazing system over the 30-60 days before they turn him out on cows. This period can allow the bull to shed excess fat and reach an optimum body condition for the breeding season. These bulls should be kept in a large enough pen or pasture so they can get daily exercise. When multiple bulls are used in a single pasture, they should be exposed to each other prior to turnout to minimize bull interactions once they join the cowherd. In conclusion, it's never too early to plan for your next breeding season.

How Do You Make a Choice?

Trent Milacek, Extension Area Ag Econ Specialist

Many farmers are confused. How do you make a choice in terms of planting decisions and crop selection for the coming year? Personalities in media are convinced soybeans are a great answer to years of low prices. Agronomists will argue that producers need to stick to the rotation. As an economist, all I can offer is a look at the numbers. (Continued Pg. 3)

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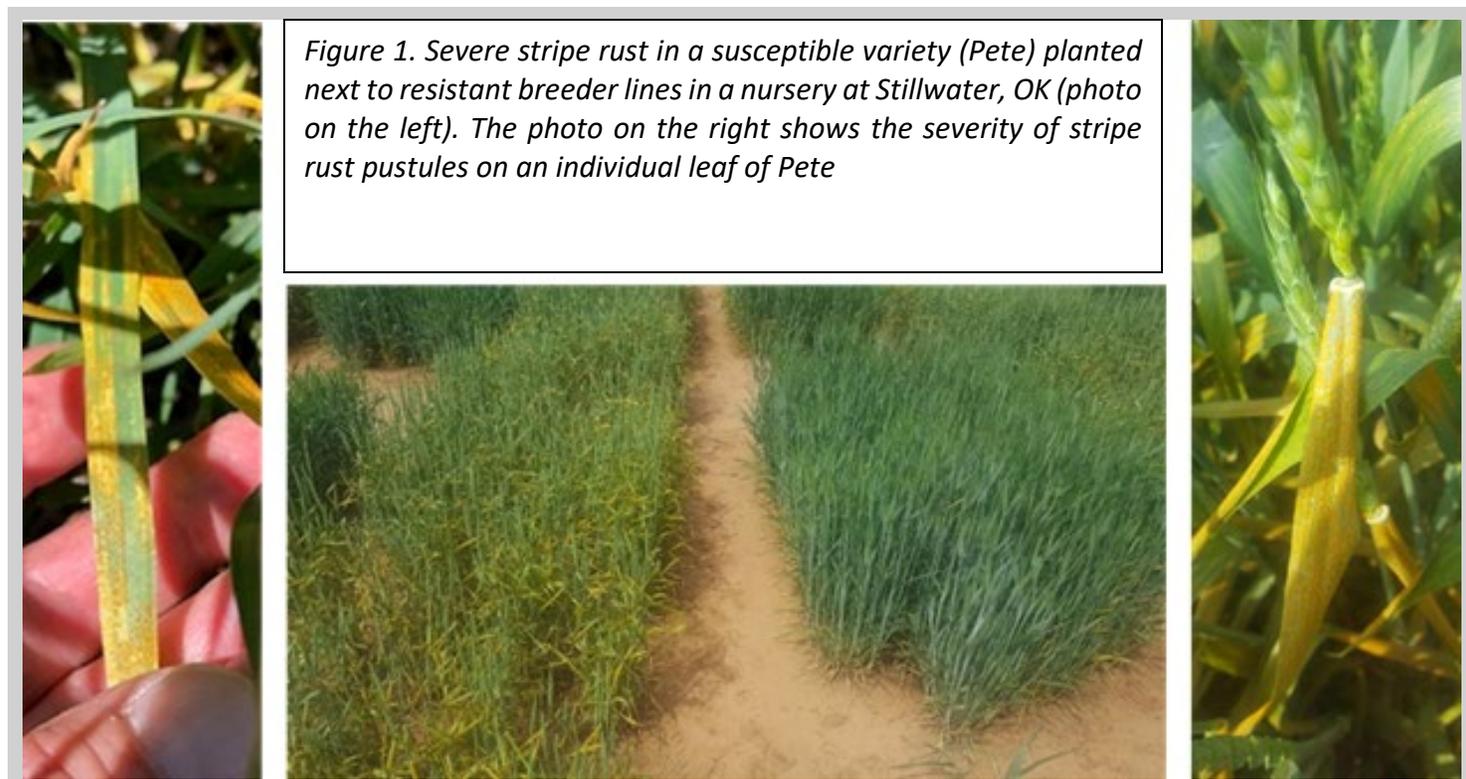


Figure 1. Severe stripe rust in a susceptible variety (Pete) planted next to resistant breeder lines in a nursery at Stillwater, OK (photo on the left). The photo on the right shows the severity of stripe rust pustules on an individual leaf of Pete

Wheat Disease Update – 23 April 2021

Dr. Bob Hunger, OSU Extension Wheat Pathologist

Just a brief update to relay that stripe rust continues to increase across Oklahoma. Bryan Vincent (Crop Consultant; north-central OK) reported severe stripe rust in “hot spots” on an unknown variety just north of Lamont, OK (Grant County) close to the Kansas border (Figure 1; left photo). In Major County, which is immediately south of Grant County, Josh Coltrain (Winter Wheat Technical Development Lead, Syngenta) reported he had, “found quite high incidence of stripe rust” in Syngenta’s plots near Carrier, OK. Here around Stillwater, I have observed severe stripe rust in spreader strips of the susceptible variety Pete. These infections stood out because of resistant breeder lines planted

immediately adjacent to the strips of Pete (Figure 1; center photo and photo to the right).

However, the most striking example I have seen of stripe rust in some time was observed by Jeff Wright (Coordinator of Production Operations; OFSS; Oklahoma State University) in an increase field of the old variety Triumph 64 near Perkins (about 15 miles south of Stillwater). As you can see in Figure 2 (two top photos), much of the entire field (9 acres) appears yellowish. Examination of leaves reveals severe stripe rust infection associated with yellowing of the leaf (middle photo). The bottom photo in Figure 2 is of Jeff’s tractor after applying a fungicide. Although the fungicide

should protect the green leaves remaining in the field, much of the leaf tissue will be killed from the stripe rust infection. This is a good example of the importance of applying a fungicide to a susceptible variety sufficiently early to prevent such widespread infection. What and how such a big and uniform infection occurred is puzzling to me, but I suspect that is related to overwintering of the stripe rust fungus in the field.

In other wheat around Stillwater, there continues to be a high incidence and severity of powdery mildew. Barley yellow dwarf also is easily found in many trials and varieties. Dr. Tom Royer has sent out an alert about finding English grain aphids around the state. These (Continued Pg. 5)

How do you Make a Choice? (Continued)

I won't attempt to bore you with all the background as this article does not intend to dive deep into budgeting. I believe simplicity is key when it comes to record keeping and budgeting because if something is simple, you are more likely to do it.

Summer crop producers have several crop options to plant in Oklahoma. I'll focus on corn, sorghum, sesame, cotton, and soybeans. Comparative analysis requires that one be fair in the assessment to get useful data. I have tried to be as neutral as possible when calculating fertilizer and land costs. As input costs like fertilizer increase, legumes will benefit from their relatively "free" nitrogen and so on.

Corn will always have more struggles in dryland areas. Oklahoma will never see huge yields unless we are under a pivot. Considering dryland production, if prices come in at \$4.25/bu. a 73 bu. yield is required to breakeven. At a 100 bushel yield a price of \$3.12/bu. is needed. This is certainly obtainable if the current ag outlooks hold.

Sorghum has really stepped up to the plate for 2021. Assuming a \$5.60 harvest price results in a breakeven budget at a yield of 46 bu./acre. If you can raise 70 bushel sorghum, the breakeven price falls to \$3.68/bu. This budget is friendly to most producers who regularly utilize sorghum in their rotations.

For those looking for a different oilseed crop that can tolerate dry and heat, you may consider sesame. Sesame prices have increased following other commodities ranging in contract price from \$0.40-\$0.46/lb. A \$0.40 price requires a 478 lb. yield to breakeven. If you can raise 700lb. sesame then the breakeven price falls to \$0.27/lb. This is increasingly advantageous, especially for producers who cannot grow soybeans.

Cotton has expanded its range in recent years. Analyzing solely dryland cotton, a price of \$0.85/lb. requires 411 lbs./acre to breakeven and a 504 lb. yield requires \$0.69/lb. to cover costs. The general strength in oilseed markets, including cotton, has taken the pressure off budgets.

I anticipate that soybeans in Oklahoma will break-even at 24 bushels per acre if a harvest price of \$10.82 can be achieved. The other side of the revenue equation can suggest that if a producer raises 25 bu. soybeans, a price of \$10.23/bu. is sufficient to break-even. The most exciting part of this observation is that both of those numbers seem very obtainable this year.

What can a farmer glean from my observations? I do not see a clear winner. The best advice I can give is to plant a crop that fits the rotation and that you are comfortable with. Manage price risk in the best way you can and focus on the things you can control. Perfect rains and sunshine cannot completely mask poor management decisions. We are paid on our skill as good managers.

UPCOMING EVENTS and DATES

May 6th, 2021 – Kay County Master Gardener Meeting
9:30A.M.

Cann Memorial Gardens, Ponca City, OK

May 6th, 2021 – Wheat Field Day @ Schieber Farms

Breakfast at 8:00a.m.

Breakfast Sponsored by Farmers Cooperative Association
Program at 9:00a.m.

Plot located at 3300 W Furguson Ave, Kildare, OK
RSVP by April 30th to Kay County OSU Extension

May 24th, 2021 – Birds and Birdseed Program at Ponca City Library

For ages 6-14 Contact the Ponca City Library for Details

June 10th, 2021 – Bees and Flowers Program at Ponca City Library

For ages 6-14 Contact the Ponca City Library for Details



Gardening Tips for April and May!

David Hillock, State Master Gardener Coordinator

Fruit and Nut

- Don't spray insecticides during fruit tree bloom or pollination may be affected. Disease sprays can continue according to schedule and label directions. ([EPP-7319](#))
- Control cedar-apple rust. When the orange jelly galls are visible on juniper (cedar) following a rain, begin treating apple and crabapple trees with a fungicide. ([EPP-7319](#), [EPP-7611](#))
- Fire blight bacterial disease can be controlled at this time.
- Continue spray schedules for disease prone fruit and pine trees.

Tree and Shrub

- Proper watering of newly planted trees and shrubs often means the difference between success and replacement.
- Remove any winter-damaged branches or plants that have not begun to grow. Prune spring flowering plants as soon as they are finished blooming. ([HLA-6404](#), [HLA-6409](#))
- Control of powdery mildew disease can be done with early detection and regular treatment. Many new plant cultivars are resistant. ([EPP-7617](#))

Lawn

- Warm-season grass lawns can be established beginning late April from sprigs, plugs or sod. ([HLA-6419](#))
- Mowing of warm-season lawns can begin now ([HLA-6420](#)). Cutting height for bermudagrass and zoysiagrass should be 1 to 1½ inches high, and buffalograss 1½ to 3 inches high.
- Damage from Spring Dead Spot Disease (SDS) becomes visible in bermudagrass ([HLA-7665](#)). Perform practices that promote grass recovery. Do not spray fungicides at this time for SDS control.

Vegetables

- Wait a little longer for it to warm up before planting cucurbit crops and okra.
- Plant vegetable crops in successive plantings to ensure a steady supply of produce rather than harvesting all at once.
- Cover cucurbit crops with a floating row cover to keep out insect pests. Remove during bloom time.

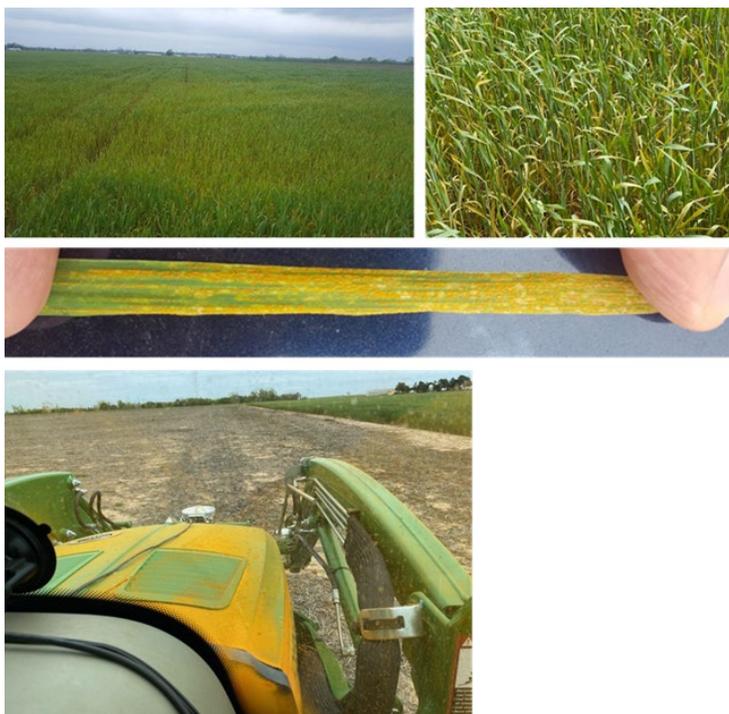
Flowers

- Most bedding plants, summer flowering bulbs, and annual flower seeds can be planted after danger of frost. This happens around mid-April in most of Oklahoma. Hold off mulching these crops until spring rains subside and soil temperatures warm up. Warm-season annuals should not be planted until soil temperatures are in the low to mid 60s.
- Harden off transplants outside in partial protection from sun and wind prior to planting.
- Let spring flowering bulb foliage remain if possible before removing it.

Landscape - General

- Hummingbirds arrive in Oklahoma in early April. Get your feeders ready using 1-part sugar to 4-parts water. Do not use red food coloring.
- Lace bugs, aphids, spider mites, bagworms, etc. can start popping up in the landscape and garden later this month. Keep a close eye on all plants and use mechanical, cultural, and biological control options first.
- Be alert for both insect pests and predators. Some pests can be handpicked without using a pesticide. Do not spray if predators such as lady beetles are present. Spray only when there are too few predators to be effective.

Wheat Disease Update – 23 April 2021 (continued.)



aphids also were observed by Bryan Vincent in north-central OK and by me here around Stillwater. Finally, the wheat field days start next week, so observations from those locations will start to appear in subsequent updates. A complete schedule of those field days can be viewed at: <http://wheat.okstate.edu/Home/plot-tours/>

Figure 2. Severe leaf rust on Triumph 64 wheat near Perkins, OK (about 20 miles south of Stillwater, OK). Top two photos show the yellowish cast to the foliage. The middle photo shows stripe rust pustules associated with severe chlorosis (yellowing) of the foliage. The bottom photo shows Jeff's tractor after applying a fungicide spray two days ago.

High Speed Internet Wireless Access Point available in Newkirk

Through cooperation with OneNet, Dr. Brian Whitacre of OSU Agriculture Economics, and Kay County OSU Extension, there is now a Wireless Internet Access Point available in the parking lot north of the Kay County Courthouse. OneNet, the comprehensive digital communications initiative of the state system of higher education, answered the call of the Keep Americans Connected Pledge by opening Wi-Fi hotspots to any American in need. OSU Extension County offices were asked to find locations that would be suitable for access points, and the Kay County Courthouse and Kay County OSU Extension Office fit the criteria.

"The latest data from the Census shows that less than 70% of Kay County households have an Internet connection, well below the national average of 83%. The COVID-19 pandemic has demonstrated just how important a reliable internet connection can be – for healthcare, school, working / searching for jobs, and staying in touch with loved ones. This Wi-Fi hotspot donated by OneNet demonstrates their commitment to providing connectivity that can improve the quality of life in communities across the state." Says Dr. Whitacre.

The internet is free to use to anyone who has a device that can connect to Wi-Fi. The internet is intended for business, school, or organizations. Simply find a parking space at the north lot of the courthouse, and safely access the internet by connecting to "Community Wi-Fi". During the hours of 8 a.m. to 5 p.m. the internet will be available at speeds up to 5Mbps, which would be sufficient for checking email, searching the internet, or watching a video. After 5 p.m. the internet speed cap will be lifted to facilitate HD video, Zoom meetings, and streaming video. The connection will not be available after 11 p.m.

All users of the community Wi-Fi from this access point will be subject to content filtering provided by OneNet in accordance with the Children's Internet Protection Act (CIPA). This protection must block or filter internet access to pictures that are: (a) obscene; (b) child pornography; or (c) harmful to minors. Additional categories may be discussed for the OneNet-provided content filtering. More information regarding CIPA guidelines is available at <https://www.fcc.gov/consumers/guides/childrens-internet-protection-act>.

If you know a location in Kay County that has OneNet as their internet provider (public buildings, public colleges, state agencies, etc.), and would be willing to allow for a Wireless Access Point to be installed, please have them contact Kay County OSU Extension and speak with Shannon Mallory about getting started. Shannon is available at 580-362-3194 and Shannon.mallory@okstate.edu.

Kay County Agriculture Monthly is a monthly newsletter, published as an educational service
by Kay County Oklahoma Cooperation Extension
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This publication, issued by Oklahoma State University as authorized by the Vice President of the Division of Agricultural Sciences & Natural Resources, was printed at no cost to the taxpayers of Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President of the Division of Agricultural Sciences & Natural Resources and has been prepared and distributed at a cost of \$0.06 for 1 copies.



**KAY COUNTY
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