

Fire ants: The sting of buying hay south of the state

Missouri livestock producers may be looking south for hay due to concerns over predicted hay shortages. Buyer beware of red imported fire ants hitching a ride on hay from south of Missouri's border.

This invasive species attacks native insects, birds, reptiles, and small animals. When disturbed, they will defend themselves against livestock and humans with a vicious sting. The sting contains a venom that causes intense burning and itching. The ants also give off a pheromone that invites their nestmates to attack. While the stings are painful, less than 1 percent of people need medical attention from being stung by red imported fire ants.

Fire ants were unintentionally introduced in Alabama from South America in the 1940s. Entomologists report them in 13 states. Few predators attack them. The good news, is that they do not survive Missouri winters.

Bales crossing state lines should be inspected and certified by U.S. Department of Agriculture or state regulatory officials. The seller should provide certification of inspection.



Also, he suggests that buyers visually inspect each bale for fire ants. Place baits such as hot dogs or peanut butter next to bales for an hour and then scout. If you find ants in hay, collect several specimens and take them to your local MU Extension office.

Red imported fire ants measure 1/8-1/4 inch long and can be distinguished from other ants by a two-segment petiole (or waist) and 10-segment antennae that end in two-segment clubs. This reddish-brown ant bears a distinctive stinger at the tip of the abdomen.

More information:

- Imported fire ant information page from USDA's Animal and Plant Health Inspection Service.
- "Out-of-state hay may harbor red imported fire ants" (2012 news release), extension.missouri.edu/n/1514.

Source: Kevin Rice, MU State Entomologist

Drought Impacts on Landscape Plantings and Lawns

The severity of the drought is detrimental to yards and gardens across the state. The economic impact to crops and the response needed to protect livestock is justifiably getting most of the attention. However, over the next few months to a year many individuals will be trying to amend some of the damages to their landscaping. Briefly listed below are some comments and tips that may be helpful in those efforts.

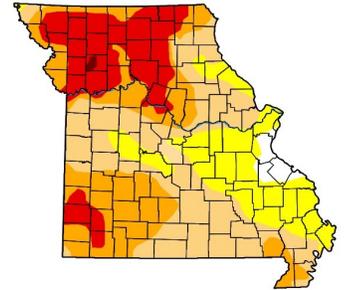
Lawns- Most people have given up on watering lawns due the time required, water shortage, or the cost. Initially when cool season grass goes dormant (turns brown) the crown is still a little green, which you can see if you dig into the thatch and look closely. However, if no moisture is received over an extended period of time (e.g. a month to 6 weeks) many crowns will die and ‘recovery’ following regular rainfall will be poor. These lawns will need to be renovated to look good, with September being the advised month for doing so. With soil conditions being so dry, some people will wait until late winter for frost seeding or early spring for renovation.

Trees and woody plants- By now each of us have probably watched a favored tree or bush turn brown, drop leaves or something in between. Two frequent questions are “will it recover” and (assuming some parts are OK) “when can I prune it”?

- If the tips of a woody plant are green that is a good sign that it may come back next year, even if it has shed most of the leaves (dropping the leaves is a way for the tree to reduce its water needs). However, the plant might not come back; you’ll only know next year for certain when it fails to leaf out. If it turned completely brown in June, July or August it is likely dead, especially so if it did so suddenly. If it did so gradually and made it into late August with some greenish/yellowish leaves, then it may have gone dormant. For

trees or bushes that have died there is no reason to wait to remove them. It is generally easier to imagine how you’d like to replant a landscape without the distraction of dead tree or bush in view.

- Don’t rush to prune. Waiting until next spring would be the preferred option. You can probably tell what is dead, but you might not know what might still die. A tree or bush might continue to show effects from the drought for some time. In the drought of 1999 I had a 30 foot fir tree that looked fine until November when it suddenly started to turn yellowish. It was totally dead by March. If you feel you ‘have’ to prune something because of its prominence, wait until we’re into cooler weather and we’ve had some rains (or you’ve watered the area well).



Herbaceous perennials, flowers and vegetables- Wildlife feeding on flowers and vegetables increases in dry weather, something most gardeners discovered last year. For annual flowers and most vegetables, one will just plant again next spring. For herbaceous perennials, most that cannot tolerate the heat and dryness die back above ground. The crowns should be ok, as they are at or below ground (reasonably protected). The dead foliage that collapses down on a crown serves a purpose to protect it. Severe cracking of the ground may result in damage to crowns through physical tearing or drying (the latter as air that can now easily enter the ground). Damage from cracking would be mitigated if the area was well mulched.

Source: James Quinn, Horticulture Specialist

Dry Field Conditions Increase Harvest Fire Risks

Harvest is a prime time for fire dangers, especially with the extremely warm, dry conditions. Fuel sources such as leaves, stalks, husks, dust, oil and fuel are always present when harvesting fields, and so are numerous sources of ignition on farm equipment or transport vehicles including exhaust, bearings and electrical wiring.

Fire safety in the field has two key components -- prevention and preparation in case a fire does break out. The following steps will help in preventing a combine fire:

Electrical systems:

- Keep wiring and fuses in proper operating condition and position.
- Properly route and insulate all replacement wires.
- Use heat-resistant insulation.

Fuel systems:

- Regularly inspect fuel lines.
- Keep fuel lines in good condition with tight connections.
- When refueling, always shut off the engine and let the equipment cool for 15 minutes before you refuel.
- Never fill the gasoline supply tank near an open flame, while smoking, or with the engine running.
- Wipe up oil and fuel spills as they occur. This prevents chaff and trash from collecting and combining to start a fire.

Mechanical operation:

- Use a pressure washer or a compressed air blowgun to thoroughly clean the machine.
- Remove excess crop residue from rotating units.
- Always inspect the machine for buildup of harvest materials (chaff and leaves) before operation.
- Keep your work area clean.
- Check lubricant levels often, and grease fittings regularly. Fix leaking oil, fuel, or hydraulic lines promptly. Check belts for proper tension and wear to reduce friction.
- Carefully check bearings for excessive heat. Overheated bearings are a major cause of combine fires.
- Check valve covers for oil leaks that can ignite as oil runs down manifolds.
- Check for cracked or loose exhaust pipes, ports and check the manifold.
- Pay particular attention to the exhaust system, checking for leaks, damage, or an accumulation of crop residue.

In the field:

- Put out any fire immediately.
- Always have a fire extinguisher within reach.
- Keep at least one fully charged 10-lb. ABC fire extinguisher on all equipment. (Or carry two: one 10-lb. ABC fire extinguisher in the cab and one 20-lb. ABC fire extinguisher where it can be reached from the ground.)
- Visually check your extinguishers monthly, looking for cracks in the hose and inspecting the gauge to see if the extinguisher is fully charged.
- Invert the extinguishers once or twice a season and shake them to ensure that powder inside the extinguisher hasn't compacted by machine vibrations.
- Have a professional fire extinguisher company inspect your fire extinguishers annually.
- Have a shovel available to scoop dirt onto a fire.
- Carry your cell phone or two-way radio with you at all times so you can summon help.
- If a fire does occur, CALL 911 FIRST, and then attempt to extinguish the fire by pulling the pin on the fire extinguisher and squeezing the handles together. Aim the nozzle at the base of the fire and sweep from side to side. Remember P.A.S.S., which stands for Pull, Aim, Squeeze, Sweep.



In addition to the combine, grain transport or pickup trucks with exhaust systems below the chassis also can ignite field fires. Catalytic converters operate at several hundred degrees. Field fires are sometimes started with the passing of a truck, and flames may not be noticed for 15 to 30 minutes. It's a good idea to not allow extra truck traffic through the field when conditions for fire are favorable.

One should remain vigilant throughout this potentially extremely warm, dry harvest season.

Source: *Kent Shannon, Natural Resource Engineer*

New Ag Specialist in St. Clair County



Raysha Tate is one of the newest members to MU Extension as an Agriculture Business Specialist and County Engagement Specialist. She's originally from Purdin MO where she grew up on her family's cattle farm. She graduated high school in 2013 from Meadville R-4. She went on to start her college career at Missouri State University in Springfield, Missouri with a dual major in Ag Business and Animal Science. After graduating with her undergraduate degree in December of 2016, Raysha continued her education at Missouri State University by pursuing a Masters Degree in Agriculture with an emphasis in Ag Business, which she completed in May 2018. Raysha join the Extension team on June 1st in the St. Clair County Extension office.