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District Extension Agent, Crops & Soils

Alfalfa Insect Management – and more! – March 6

There's a formula in our K-State Research and Extension *Alfalfa Weevil* publication for calculating degree days as a predictor of alfalfa weevil development. It requires a record of the daily high temperature (anytime it exceeds 48 degrees) then adding it to the lowest temperature for the day (or 48 degrees...whichever is higher), dividing it by two then subtracting 48. Doing so will give an idea as to when the weevil hatch might begin so you can start scouting.

Or...you can keep two things in mind: alfalfa weevil development progresses at temperatures above 48 degrees F and the Kansas Mesonet alfalfa weevil growing degree day tool (<https://mesonet.k-state.edu/agriculture/degreedays/>) can do the calculation for you. In fact, that Mesonet growing degree calculator for alfalfa weevils *already* has us well ahead of typical development for this time of year, meaning it's time to start planning for weevil management.

To assist alfalfa managers with that management for the coming season, K-State Research and Extension Field Crops Entomologist Dr. Jeff Whitworth will be our guest for a discussion focusing on alfalfa pest management on Wednesday, March 6th at the Woolsoncroft Event Center (1615 Branch St.) in Seneca. Drop by for coffee at 10:15 with the program beginning at 10:30 with a discussion of an area alfalfa weevil monitoring program. Dr. Whitworth will then talk multiple alfalfa pests (weevils, aphids, etc....) with a brief overview of weevil development followed by product selection considerations and application best management practices. He'll finish the morning with a question-and-answer session open to discussing surrounding insect pests of *all* field crop insect pests (corn, soybean, etc...) before we finish around noon with a light lunch.

RSVP's are requested to help with a meal count. You can do so via email to me at dhallaue@ksu.edu or by calling the Meadowlark Extension District Seneca Office at (785) 336-2184. In case of inclement weather, please call the Seneca Office to determine the status of the meeting. Hope to see you there for any/all our morning's topics!

Alfalfa Weevil Management – Be Ready

Alfalfa weevils develop based on growing degree days. That's days above 48 degrees F with growing degrees accumulating faster with higher average daily temperatures above 48. According to the Kansas Mesonet alfalfa weevil growing degree day tool at <https://mesonet.k-state.edu/agriculture/degreedays/> (it calculates the growing degree day accumulations at the state's Mesonet stations), most of Northeast Kansas is well ahead of normal. If our current weather pattern remains, it could be an early year for alfalfa weevil pressure.

While it's not likely hatch and feeding has yet occurred, the southern areas of the Meadowlark Extension District will likely see it happen sooner than later. Scout alfalfa fields appropriately and have a management plan in place should treatment be necessary. One good resource is efficacy trials done by KSU entomologists comparing products. It can be found at: <https://entomology.k-state.edu/extension/crop-protection/efficacy-trials/alfalfa.html>.

If you can, consider attending our Alfalfa Insect Management discussion with KSU Entomologist Dr. Jeff Whitworth March 6th in Seneca. Drop me a line for more information.

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Sire Selection Decisions

We are daily faced with decisions and each decision leads to different outcomes. I once heard that the primary selection decision a cow/calf producer makes is deciding which bull to use/purchase and mate to which female. After that point, everything else is a matter of reaction and culling based upon that original decision that can't be undone. This illustrates to me that careful consideration should be given to this process. As commercial semen company catalogs hit the mailboxes and bull sale season gets into full swing, there are a few general considerations that producers should ask themselves. This is by no means a complete list, as the amount of information and data grows annually, but are more the "big picture" considerations of sire selection.

Does the operation sell all the calves as terminal feeder calves, focus on replacement females/ bulls or a balance of both? Balancing maternal and terminal traits can be tricky. This is especially true if cows are run in single pastures with one or even multiple bulls. If you want to keep your own replacement heifers and you don't want to either use multiple bulls, with multiple breeding pastures or an investment in parentage testing, or utilize AI (potentially with sexed heifer semen) then the goal is to find bulls with strong maternal traits in their EPD profiles. This could mean giving up traits that are more important to the feeder calf side of the operation, including growth traits and possibly even carcass traits. Balanced trait selection and use of combined selection indexes, focused on your traits of interest, are important so take the time to understand what these are from your respective breeds.

Should I be looking at actual measured data (weights, scans, ratios, etc...) EPDs, genomic percentile ranks or a combination of all of these? What if this data contradicts? For making selection decisions, the EPD truly is designed to be the best tool. Every other data source for a specific trait (adjusted phenotype measures, the genomics, pedigree, etc.) is already included in the calculation of the EPD. Phenotypes like weights and scans are affected by both genetics and environment. Genomic profiles by themselves do not account for the bull's own performance. Only the EPD brings all those pieces together and appropriately weights them. Indexes go one step further and use multiple EPDs in specific weightings around a particular trait to give an index value.

To go through an example, let's look at one specific trait. Say a live calf, being born unassisted, is the main focus of an operation. What tool best helps me determine which bull should be used? Is that Calving Ease EPD, Birthweight EPD, Calving Ease Indexes, Actual Birthweight or Dam's Birthweight Ratio? Calving ease EPD and Indexes are going to be the most effective in this situation. Calving ease direct EPD are an estimate of how easily a bull's calves will be born when he is bred to heifers. Calving ease maternal EPD are an estimate of how easily a bull's daughters will give birth when they have their first calf. Calving Ease Indexes are combinations of EPDs related to calving ease, and offer a good tool for selection around this trait. While it may be tempting to select on birth weight, as birth weight is only an indicator of calving ease, it does not tell the whole story. In addition, birth weight records are used to calculate calving ease EPD and selecting on both will not improve calving ease more than selecting on calving ease alone.

As stated earlier, this isn't a complete list of considerations when deciding which bull to use, but hopefully gives an idea of a way to approach the growing amount of data found around selection decisions. There are many important phenotypical traits to consider like structure, feet and legs, and disposition to name a few. Remember the lasting effects a herd sire has through his progeny, give careful consideration to making an informed decision and select wisely.

Laura Phillips
District Extension Agent, Horticulture

It's Time to Prune Your Trees

As spring gets closer, one of the most pressing things on our outdoor to do list is tree pruning. Late winter and early spring are the best time to prune for a flush of spring growth while causing the least amount of damage to your trees.

Tree pruning can feel intimidating, but by understanding your motives and goals for pruning, it can be an easy and quick task. The biggest goal is to create a safe, strong tree. Most trees should have a strong central leader with large branches coming off 45-to-60-degree angle. This limits the odds of branches snapping or the tree falling. The early years are the most essential for pruning, as it is difficult to impossible to change the structure of a large tree.

The other reason to prune, is thin out the canopy. Dense branches can prevent light from reaching interior leaves, and you may see increased branch die back. A thick canopy also means that wind cannot flow through the tree. Instead, wind pushes against the tree, which can cause damage and broken branches. Additionally, increased airflow in a canopy helps prevent disease by reducing moisture on the leaves.

To start the pruning process, start by targeting the three D's: dead, damage, and disease. Branches that are dead, or are damaged beyond recovery should be removed. If you see any signs of disease on the branches, like discoloration or irregular growths in the branch, you will likely want to remove those as well.

After that, you will want to target other problem areas. One problem is weak branches that come off the trunk at a narrow angle. Another is branches that overlap and rub against each other. These branches can hit against each other in the wind and cause damage.

There are a few things to keep in mind while pruning. Although you have a lot to accomplish while pruning, try to limit the number of cuts you make, and selectively take branches that will get you closer to your ideal tree form – which is likely a central leader form. Make sure you take branches from all sides of the tree so that you maintain an even weight distribution. In general, you do not want to remove more than 25% to 30% of your tree's branches at once or you risk damaging your tree. Dead branches that you remove do not count towards this.

Lastly, if you have fruit trees, there are a few more things to keep in mind. When pruning fruit trees, your apples and pears do need a central leader form, stone fruits like peaches or plums will do best with an open vase shape. As you prune to the proper shape for your type of fruit tree, look for flower buds. These buds are where fruits will form. If you make cuts that remove all your flower buds, you will not get any fruit. If you leave all the branches, fruit can weigh down tree and cause significant damage.

Learning to prune trees can be a very visual process. If you are new to pruning, you can find videos and resources available online at kansashealthyards.org, or check out the recording of our Garden Hour Webinar from March 2021 on tree pruning on K-State Research and Extension's YouTube Channel. Lastly, do not forget to reach out to your local extension office for more assistance!

Teresa Hatfield
District Extension Agent, Family and Community Wellness

Health Effects of Daylight Savings Time

Daylight Savings Time is approaching, Sunday, March 10 at 2:00 a.m. This means we will step our clocks ahead one hour and lose an hour of sleep. Although this means spring is just around the corner, this time change is challenging. It is nice to get that extra hour of sunlight in the evenings. Still, according to the Centers for Disease Control (CDC), there are health impacts for the first weeks after the time change until our internal clocks become accustomed to the change.

Our body uses environmental cues to regulate our natural clock, called our circadian system. The sunlight helps keep this clock regulated. In the mornings, sunlight resets our clock for the 24-hour day. In the evenings, the lack of sunlight triggers our brains, releasing hormones that make us sleepy. When we move our clocks ahead one hour in the spring, our clocks get off-kilter. This sudden shift to darker mornings and longer evenings can have adverse health effects. This can lead to people not getting enough rest. We are groggy in the mornings, and we have a more challenging time going to sleep at night with the sun not setting until later in the evening.

Lack of sleep makes us feel tired and less alert in the mornings. According to the CDC, there is up to a 30% increase in the risk of having a heart attack. Fatal traffic accidents increase by 6 %, with the highest incidents in the mornings. Workplace accidents also increase right after the springtime change. The time change can also bring about mood disturbances and exacerbate existing mental health challenges.

There are some things you can do to help mitigate the time change. The body can take several weeks to adjust to the new routine.

- Adjust your sleep cycle a few days before the time change. Try going to bed 15 minutes earlier each night.
- Set your clocks ahead one hour in the early evening on Saturday night. Then, go to bed at your regular bedtime.
- Go outside Sunday morning after the time change to soak up some early morning sunlight. The bright light will help reset your body clock.
- Be extra careful when driving, and be aware that the time change could affect your body.
- Try to maintain your current sleep schedule even after the time change.
- Avoid stimuli before bedtime, such as smartphones, tablets, and computers.
- And keep up your exercise routine.

Everyone reacts to the time change differently. Give your body time to adjust. Depending on whether you are an early riser or a night owl, you may face different challenges adjusting to the change. People with a late-to-bed, late-to-rise sleep pattern will have a more difficult time adjusting.

Resources: Centers for Disease Control and Prevention

Cindy Williams
District Extension Agent, Food, Nutrition, Health and Safety

Home Filing Systems Helps to Organize Life

Nearly three months have passed into the New Year. Was one of your resolutions this year to **get organized?** It's still not too late. The best place to begin is with a home filing system.

A well-organized filing system for your household can pay big dividends when it comes time to find an important paper you need NOW!!

No one filing system is best for everyone. What works for you could be a disaster for someone else. However, once set up, a filing system can help you be more effective and efficient financial manager and decision maker.

A home filing system makes important papers readily available when you need them. If properly managed, your filing system can get older papers out of the way, making needed records more accessible.

To help you set up a workable, efficient and effective filing system for your household papers, consider the following suggestions:

- Buy the proper equipment and tools for your filing job. You might need only a heavy cardboard box or an accordion file. Another family may do best with a two or four drawer file cabinet. Roper tools include file folders, with many to choose from. Color coding if possible.
- Color-coding. To color-code, put different types of files in folders of different colors. Use colored files or colored labels. Many varieties are available. The key point to remember is consistency.
- Specific place. Keep your home files in a specific place. Then follow the time-honored home management rule: A place for everything and everything in its place.

For detailed information on setting up a home filing system, including listings of suggested file system divisions, contact your local Meadowlark Extension offices located in Oskaloosa, Holton or Seneca. Ask for the K-State publication called "Organizing Household Records".