Hello Northeast Ohio Counties!

Hopefully, if you deer hunt, you were successful last week. Ashtabula County remains one of the top counties for deer harvested with 2,167 this year.

The first story in today’s newsletter includes a link to a survey for our state farm management team. The survey takes less than a minute and ask you to rank what farm management resources you need or would like to learn more about. Completing it will help show which farm management resources producers need most.

Have a great week!

Lee Beers
Trumbull County Extension Educator
Andrew Holden
Ashtabula County Extension Educator
Angie Arnold
Portage County Extension Educator
Farm Management Needs Pulse Survey
Source: https://u.osu.edu/ohioagmanager/2020/12/08/farm-management-needs-pulse-survey/

The Ohio State University Extension Agriculture and Natural Resources program works to improve production and maximize profitability while promoting environmental stewardship.

We are reviewing our farm management resources and ask you to rank your “top 3” areas from the following list for your farm management needs and support wanted.

1. **Agricultural Finance**: farm income, farm business analysis, financial management, budgeting, and investing, agricultural taxes, benchmarking, record keeping
2. **Agricultural Human Resources**: farm succession planning, labor law and policy, human resource management/labor management, liability
3. **Agricultural Law**: legal issues within the agriculture system and estate planning
4. **Agricultural Marketing**: marketing and price analysis, commodity trading
5. **Agricultural Policy**: Farm Bill/Agricultural Policy, environmental and resource policy agricultural trade
6. **Agricultural Production and Risk Management**: risk evaluation and management, land use, crop and livestock production, crop and livestock insurance
7. **Agricultural Supply Chain Stability and New Market Access**: stability of upstream and downstream supply chains during disruptions, identifying new markets
8. **Rural and Community Development**: infrastructure – broadband access, community resources, health care, non-agricultural small business support; rural/urban interface

Please complete the survey at: https://go.osu.edu/FarmMgmtNeeds by December 18, 2020.

Thank you.
2020 Ohio Soybean Performance Trial: Results from All Locations Available

By: Laura Lindsey, Allen Geyer

The purpose of the Ohio Soybean Performance Trials is to evaluate soybean varieties for yield and other agronomic characteristics. This evaluation gives soybean producers comparative information for selecting the best varieties for their unique production systems. A pdf copy of the trial can be downloaded here: https://stepupsoy.osu.edu/soybean-production/variety-selection/ohio-soybean-performance-trial. The data are also available on the Ohio Crop Performance Trials website (https://www.oardc.ohio-state.edu/soy2020/) in a sortable format.

The 2020 trial included 21 brands of soybean tested in six Ohio counties (Henry, Sandusky, Mercer, Morrow, Preble, and Clinton). Entries included non-GMO (conventional), Liberty Link, Xtend, Enlist, and Liberty Link/Glyphosate tolerant. In the north region, soybean yield averaged 51 to 53 bu/acre. In the central region, yield averaged 57 to 60 bu/acre, and in the southern region, yield averaged 72 to 76 bu/acre.

Non-GMO Soybean Weed Management Fact Sheet

By: Mark Loux

An updated version of the fact sheet “Herbicide Programs for non-GMO soybeans” is now available. A print ready version can be found here, and it’s also available on Ohioline here. The basic approach with herbicides has not changed much. Weed control in non-GMO soybeans can be challenging, and increases the selection for resistance to site 14 herbicides (fomesafen, Cobra). The new version emphasizes several things, including:

- Plant non-GMO soybeans in fields with a history of several years of crop rotation and effective weed control that has prevented weed seed return to the soil and reduced weed populations.

- Maintain a rotation where non-GMO soybeans are planted every four years, with two years of corn and one year of traited soybeans in between, or other crops as appropriate for the farm operation.
- Fall herbicide treatments should be used to manage marestail, winter annuals, dandelion, and other perennial weeds. Marestail can be especially difficult to control in no-till, non-GMO soybeans unless a fall herbicide treatment is used.

- Planting non-GMO soybeans in fields with waterhemp is not recommended due to the high frequency of resistance to ALS and PPO inhibitors, which eliminates all POST options for control.

As always, contact us with questions or for more information – loux.1@osu.edu.

**Turning a weed into a profit-yielding crop**

By: Alayna DeMartini

People who garden may know about pennycress. It’s also called “stinkweed” for the odor it gives off when it’s crushed.

Unlike most weeds, pennycress seeds contain a lot of oil, and that oil can be turned into fuel for jets or diesel trucks and cars.

Two researchers at The Ohio State University College of Food, Agricultural, and Environmental Sciences (CFAES) just began a study to create the most resilient, high-yielding varieties of pennycress for farmers to grow.

Planted in late fall and harvested in spring, pennycress could offer dual benefits to farmers. It could protect their fields from erosion in fall and winter. And it could lead to extra money in spring when harvested and sold.

“It’s been said that weeds are just plants out of place. So, if pennycress proves to be desirable to have around, it may lose its identity as a weed,” said Alex Lindsey, one of the two CFAES researchers involved in the study.

Through a grant from the U.S. Department of Energy, Lindsey and Andrea Gschwend, also an assistant professor in CFAES, will improve the genetic makeup of pennycress to develop pennycress varieties that can endure drought and flood conditions. During winter, pennycress will need to survive with little to no water when the ground is frozen, and a lot of water during spring rainstorms.

“The appeal of this is a farmer would be able to add a crop to their field rotation,” Gschwend said. “They can harvest pennycress and then plant soy and corn on those same fields. It shouldn’t compete.”
The study Gschwend and Lindsey are doing is funded by a $13 million grant divided up among nine institutions, including Ohio State.

Some pennycress varieties can yield 65 gallons of oil per acre, which can be converted into jet fuel. Pennycress is among many other plants, including corn, that can undergo fermentation and then be used to produce fuel.

Besides being able to convert pennycress into fuel, ground-up pennycress seed can be eaten by animals as well as people. Since pennycress contains erucic acid and other ingredients that can make it hard for animals and people to digest, the seed has been genetically modified to reduce those ingredients.

“There are efforts to get rid of those and other weedy traits to make pennycress more desirable in the field,” Gschwend said.

(CFAES researchers are working on the pennycress study along with Illinois State University, the Carnegie Institution for Science, the University of Minnesota, the Donald Danforth Plant Science Center, the Oak Ridge National Laboratory, the Pacific Northwest National Laboratory EMSL, Western Illinois University, and Washington State University.)

The New Tick on the Block in Ohio – Gulf Coast Tick

By: Tim McDermott DVM, OSU Extension Educator, Franklin County
Source: https://u.osu.edu/beef/2020/12/02/the-new-tick-on-the-block-in-ohio-gulf-coast-tick/

Right now, you are probably getting tired of hearing from me about new tick species and the diseases and potential allergies they vector to producers, livestock, and companion animals in Ohio that we have to worry about. I wrote an article for All About Grazing back in June of 2019 warning about the mammalian muscle allergy that can make you allergic to red meat from a Lone Star tick bite. My colleague Erika Lyon submitted an All About Grazing article introducing you to the Asian Longhorned Tick in January of 2019 and I submitted an article as a follow up to the Asian Longhorned tick in Ohio in July of 2020. Now we have a confirmed case of that invasive in Gallia county and are keeping our eye out for further spread. It is enough to make your head spin even further in this challenging 2020 year.

The tick we are going to talk about today is the Gulf Coast tick, Amblyomma maculatum Koch. This tick is not an invasive like the Asian Longhorned tick, but instead has a very long history of impacting the livestock industry in the United States. First described in 1844 this tick has had a historical habitat range of coastal grassy areas as its name implies, mostly in the southeastern United States. The tick played an important role in the spread of the devastating screwworm outbreaks in the southern United States in the
early 1900’s through infestations of livestock. The bite of the Gulf Coast tick can cause severe inflammation and ulceration at the attachment site because it has a very large hypostome (mouthpart) that it uses for attachment and feeding and this provided an easy entry path for screwworm larvae into the livestock host. A preferred feeding site on livestock is the ears and if numerous ticks bite and attach you can have swelling, inflammation and drooping of the ears, also known as “gotch ears.” This tick species has shown the ability to migrate and to spread to new habitat over time gradually expanding its range up the east coast as well as into pasture habitat in Kansas, Oklahoma, and Arkansas. It had been noted to have a migration pathway up the Mississippi River and Ohio River valleys and has now been confirmed in Ohio in Hamilton and Butler counties. What does that mean for Ohio as well as our surrounding neighbor states? The best guess is that it will continue to spread slowly to new habitat and new host ranges. This tick can travel on birds so spread to other regions is not unheard of. The habitat that this tick prefers is similar to the American Dog Tick such as pastures, meadows or more open areas and it is noted to be a little more sunlight and heat tolerant than other tick species. Besides birds, this tick feeds on multiple species including humans.

In terms of medical importance to producers, companion animals and livestock there are several diseases that we need to be aware of. It can vector, or transmit the disease Hepatozoon americanum, a protozoal parasite which causes Hepatozoonosis in canines. In livestock it can vector the pathogen for Heartwater, although this is not found in Ohio currently. In humans this tick is known to transmit the bacteria Rickettsia parkeri which causes a spotted fever that is similar although not as severe as Rocky Mountain Spotted Fever.

When you are outside working your animals, enjoying time with family or your pets make sure to practice tick-safe behaviors such as permethrin treated clothing, frequent tick checks, and use of repellants to keep yourself safe. Make sure to include your furry friends in your plan for ticks with a veterinary approved product for flea and tick control as well.

**The Goal: Feed Less, Graze More**

By: Victor Shelton, NRCS State Agronomist/Grazing Specialist

Source: [https://u.osu.edu/beef/2020/12/02/the-goal-feed-less-graze-more/](https://u.osu.edu/beef/2020/12/02/the-goal-feed-less-graze-more/)

I often talk about upcoming grazing conferences this time of year. Right now, meetings in person are scarce and perhaps rightly so. I still encourage you to continue learning whether it’s from watching YouTube videos, reading books or articles, or attending a virtual meeting or conference.

It is also the time of year when I start thinking more about finding a comfortable chair, a warm blanket and some good reading material — especially when the snow flurries.
start. Winter is a great time for me to catch up on reading after checking on livestock in the cold, as long as I don’t get too warm and nod off. But, that said, winter chores still must be done! I’m never mentally prepared for winter, but that won’t stop it from happening. What’s a perfect winter to me? It includes stockpiled forages lasting for as long as possible, dry or frozen ground and as little hay needed to be fed.

You certainly can’t control the weather. You need to instead learn how to work around or with it, especially the farther north you live. Last month I asked the question “will there be enough feed or forage for your livestock until spring?” Livestock either have to be grazing something or be fed. One of the best ways to reduce winter feeding issues is to decrease the amount of winter feed that needs to be given to your animals. It is almost always cheaper to graze than it is to feed. Remember, if a wheel is turning, you are spending money.

The more animals are concentrated, and especially when fed in one spot, the more resource concerns you will have. Seasonal feeding areas need to be managed and minimized to reduce environmental impacts and for the health and well-being of the herd. Cold weather and mud certainly increase livestock nutritional requirements, intake and costs. So, let’s first try to reduce the timeframe for when winter-feeding areas are really needed.

Certainly, the longer you can graze annuals or crop residue in the early fall, the longer the pastures get to rest, grow and stockpile. The more stockpile you have, the longer you can graze into the winter. This all reduces the amount of time needed in winter feeding areas.

Making hay and feeding hay is the most expensive part of being in the cow business! It generally costs up to $2/cow/day to feed hay and that is without counting waste. Jim Gerrish, University of Missouri-Forage Systems Research Center Manager, really made me start thinking several years ago when he said “there was more money to be made in the cow/calf business by managing cattle during winter; not just during the growing season.” Gerrish has also pointed out that no matter where people lived, they tended to feed similar amounts of hay. That doesn’t make any sense! You would think the ones in the far north would be feeding a lot more than the ones in the deep south, but quite often that’s not the case. The longer the growing season, the more forage you can normally produce allowing you to graze a lot longer and perhaps easily not feed any hay; some have learned to be efficient, some haven’t. If a wheel is turning, you are spending money.

Your goal each year should be to feed less and graze more. Think about how short you can cut your feeding time frame. If you are feeding hay five months out of the year now, can you reduce that to four, three or less?
If you are short on forages during the growing season and don’t change animal numbers or improve that animal-to-forage balance, you will be spending a lot of time and money feeding during the winter. If you want to graze longer and reduce winter feeding inputs, you first need to balance your forage base with the number of animals you have. Generally— and this is a huge “it depends” — on where you are located, your forages and your soils, but you’ll usually need at least 2.5 acres per animal unit to supply dry matter requirements. An animal unit is 1,000 pounds of live weight. That 2.5 acres also includes being efficient in grazing or feeding.

If you don’t have enough acres, then work to increase forage yield on the acres you do have. If you can double production on what you have, you just doubled your acreage without the extra taxes. You also need to be as efficient as possible in allocating out that forage and getting as much production as you can from it. You can increase production with good fertility, good soil health and good management.

I talk about “stop grazing” heights quite a bit. This is not only important during the growing season, but also over winter. This residual is important in the winter to reduce runoff, increase infiltration and to help balance that grazing animal next spring when forages are washy and have less fiber. So, it’s good to leave a bit behind anyway. What is ideal? Four inches for cool season forages such as orchardgrass and tall fescue and six inches for warm season grasses such as big bluestem.

That can be grazed down tighter if you want to slow spring growth which is a positive thing if you are trying to get more clover into the stand. It takes some of the competitive edge away from the perennial grasses.

Winter, and certainly early spring grazing, can be challenging at times. Ideally, you want either dry or frozen conditions, but you don’t always get that. The more forage growth that is present when you do graze it, the less negative soil impact there will be in most cases. This is especially true if animals are not allowed to linger or remain on the same spot for very long. This is also true when grazing annuals on cropland and a good reason to not feed supplements or hay on cropland. You don’t want to cause any undue compaction or have any long-term negative effects. An abundance of roots, soil life and natural freezing and thawing action fixes most compaction issues. You also don’t want too much disturbance. This generally occurs trying to graze it down too close to not “waste anything,” especially under wet conditions. Too much disturbance creates openings for opportunistic weeds.

It would be nice if hay was just a primary part of your contingency plan – your insurance policy. You would use it to meet shortfalls in production. But don’t be afraid to feed hay if needed, especially if it will help production later and or reduce winter feeding time frame. That option sometimes appears during dry spells in the late summer. Reduce its use when possible to decrease resource concerns and input costs. It also never hurts to
keep animal numbers flexible too. Remember, it’s not about maximizing a grazing event, but maximizing a grazing season! Keep on grazing!