



# Nemaha County

## Ag Line

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By: Gary Lesoing, Nemaha County Extension Educator

### TORNADO SEASON IS NEAR!

We can never be surprised at the weather we may have in Nebraska this time of year. A year ago we had a significant snow on April 1<sup>st</sup>, and Saturday there was a skiff of snow in southeast Nebraska. With the Bomb Cyclone hitting Nebraska on March 13<sup>th</sup> and 14<sup>th</sup> with an unprecedented devastating storm in Nebraska, it shows how extreme the weather can be in Nebraska. Two years ago we had a couple of tornadoes right here in southeast Nebraska. A year ago, there were severe tornadoes in several parts of the United States, and a few already in 2019. With extreme weather conditions this winter, warm temperatures some days, the coldest temperatures in years on other days, and more snow this winter than we have had in several years, anything can happen. The variable temperatures we have can potentially develop into severe weather, and even spawn tornadoes. Each year is different, and 2019 is no exception. We have already had roller coaster type weather with extremes the past several months. Over the last fifteen years, southeastern Nebraska has been hit hard by a number of tornadoes, with some of them devastating communities! Tornadoes in other regions of the state have taken their toll as well. Remembering this, the last thing you want to hear is that tornado season is near! Unfortunately it is. The climate continues to be ever changing, and the weather is extremely unpredictable, so we should be prepared to expect any type of weather this spring and summer. Temperatures continue to fluctuate from day to day this spring, which can be very conducive to severe weather, including tornadoes.

Are you ready for a tornado? Do you know what to do if a tornado is headed your way? With severe weather beginning, it's time to be prepared for tornadoes. What are some things we should do to be prepared for a possible tornado? First, you need to have a place in your home where family members can gather if a tornado is headed your way. It could be in your basement or else in a center hallway, bathroom or closet on the lowest floor if there is no basement. If you are in a high-rise building, go to a place in a hallway in the center of the building, you may not have time to go to the lowest floor. Your place of work should also have a tornado plan. If you are unaware of it, find out what it is.

If there are storm warnings issued for your area, listen to your local radio and TV stations for updated storm information. You need to know the difference between a tornado WATCH and WARNING. A tornado WATCH

means a tornado is possible in your area. A tornado WARNING means a tornado has been sighted and may be headed for your area. Go to safety immediately. If a tornado WATCH is issued, listen to your radio and TV and be alert to changing weather conditions. Environmental clues that indicate a tornado may be developing include: a dark, often greenish sky, a wall cloud approaching and large hail. Blowing debris may also be a sign of an approaching tornado. People say a tornado sounds like a freight train. If a tornado WARNING is issued go to the safe place you picked to protect yourself from glass and flying objects. If you are outside, hurry to the basement of a nearby sturdy building or lie flat in a ditch or low-lying area. If you are in a car or mobile home, get out immediately and head for safety as described above. After the tornado passes, watch out for fallen power lines and listen to the radio for information and instructions. Use a flashlight to inspect the damage, never use candles! A gas line may have ruptured, leaving highly combustible natural gas or propane in the area.

The most important thing is to be prepared for a tornado and don't take the threat of a tornado lightly. The destruction and devastation from tornadoes can be unbelievable.

### REMEMBER FARM & HIGHWAY SAFETY

With everyone anxiously waiting for field conditions to improve so field work can begin this spring, it is important for safety to be an important focus for farmers and others in our rural communities during this busy time of the year. With very little anhydrous ammonia applied last fall, farmers are in a situation where time is of the essence for completing field operations so crops can be planted in a timely manner. Under these types of circumstances and with this sense of urgency developing, farm accidents are more likely to occur. When people get in a hurry, they tend to forget to check everything and are not as careful. Agriculture is the second most dangerous industry in the United States. Approximately 100 children and youth die in farm work accidents annually in the United States. In the spring of 2010 there were five farm fatalities in Nebraska in a matter of a few weeks. There have been a number of ATV injuries and fatalities to youth on farms in Nebraska and other states in recent years as well. It is extremely important to be aware of farm hazards to prevent potential farm accidents and even fatalities on the farm. It is important for farmers and travelers alike to be aware of the dangers of equipment being transported on the highways and country roads. This is especially true **NOW!** With I-29 closed and most of these travelers

frustrated that they cannot drive on a four-lane highway, Highway 75 is like the interstate, except it is only a two-lane highway. We will need to be extremely careful and drive defensively at all times. Be extremely careful when moving equipment on the highway! There have been a number of accidents on Highway 75 already, with one fatality!

Sometimes it is very difficult to see, especially around dusk or dawn when the sun sometimes blinds you as you drive toward it. Country roads can be dusty, making driving particularly hazardous when equipment is moving from field to field. While these conditions call for cautious driving for the traveler, farmers need to have the proper SMV (Slow Moving Vehicle) signs on their equipment. It is also important that farm tractors and sprayers have functioning hazard-warning lights. Operating headlights and hazard-warning lights provide advance warning for other drivers on highways and country roads. With the extra traffic load on Highway 75, local people may be taking alternative county road routes to avoid the heavy traffic. When traveling at night, make sure all the hazard lights and headlights are working properly and be extremely careful watching out for traffic on the highway and county roads.

Safety at the farmstead and in the field must not be overlooked either. Equipment, tractor, and truck operators must always be aware of other people in the area, particularly young children and elderly people. When entering the farmyard, especially at night, be alert to pedestrians. If you are starting up and will be moving equipment, check to make sure everything is clear and there isn't anyone playing or looking around the equipment. Many times young children may be playing in and around equipment and are difficult to see. Sometimes people may be looking at equipment and they do not hear it being started up and may end up in the way and at risk of getting injured. Always protect yourself, use caution, and practice safety first!

Finally safety in the field must not be overlooked. While you may be very careful when you're on the road or at the farmstead when other people are involved, **don't forget safety in the field**. Especially this year, when we are behind on fieldwork and there is pressure to get the work done. We must not ignore safety when we're in the field. **Always** be sure to follow all safety guidelines listed in the manufacturer's operator manual and **always** have shields in place, and support equipment properly when working under it. The bottom line is "**JUST BE CAREFUL!**"

## MANAGING CROPLAND IN 2019

As we move forward in anticipation in 2019, management of crops and cropland will be key. With all the significant rainfall last fall and snow and rain this spring, fields are generally saturated even if they were not impacted by floodwaters. Very little fertilizer was applied last fall, so you may want to consider a different strategy for nitrogen application this year, especially if fields are wet. Doing field operations when it is too wet can cause compaction issues that may result in a long-term effect on

the soil. A possible alternative is planting cornfields when it is dry enough and applying part of the nitrogen (N) at planting, with the remainder applied during the growing season when nitrogen can be utilized. Technology is now available during the growing season with sensors to determine N needs of corn and apply N as a prescription with an airplane or high clearance equipment or with fertigation through a center pivot irrigation system if you have irrigation. Research conducted through the On-farm Research Network in 2018 in southeast Nebraska compared a strategy where 100 lb/N was applied as pre-plant anhydrous ammonia and the remainder applied with an airplane based on the prescription developed from a drone with N sensors. The drone based N management system showed a nitrogen savings of 27 and 35 lbs/ac at sites 1 & 2 respectively, in Richardson County using this N management method compared to a conventional method of pre-plant anhydrous ammonia. There were no significant differences in corn yields (183 vs 183 bu/ac) for either N management system at site 1 or site 2, with corn yields (201 vs 203 bu/ac) for the Drone N system vs Farmer System respectively.

Weed control is also extremely important. With the wet weather last fall, very few acres received herbicides for control of winter annuals in fields where there were previous issues with marestail. Cover crop acres were also reduced due to the wet weather last fall as well. Cover crops, especially cereal rye has been an excellent strategy for suppression of marestail. It is important to control marestail early this spring, prior to the plant bolting (shooting a stem). It will really be challenging controlling marestail if it bolts and is glyphosate-resistant, which the majority of it is. The other two resistant weeds that cause major issues in southeast Nebraska are waterhemp and giant ragweed. Use as many different strategies as possible for control of your weeds, primarily several different modes of action for your herbicides. Hopefully you have not identified any Palmer Amaranth on your farms. If it is identified, do everything you can to control it and keeping it from going to seed. It is the one weed we do not want to get established here in southeast Nebraska, and unfortunately, it has been identified not too far away.

Using Integrated Pest Management (IPM) for managing diseases and insect pests is also an excellent strategy to use in both corn and soybean production. Scouting fields and using information made available on "**CropWatch**," can determine potential insect and disease problems and help decide if levels are at the economic threshold and treatment is recommended. Sampling soybean fields for diseases, such as Soybean Cyst Nematodes (SCN), Sudden Death Syndrome (SDS) or Frogeye Leaf Spot or insects, like Bean Leaf Beetles, Soybean Gall Midge or Soybean Aphid will provide you the information needed to make the right decisions and use the tools available to protect your crops.

Finally it is important to manage fields individually. While some fields will benefit from a pesticide, others may not. Use practices that reduce erosion, protect the environment and be a good neighbor. Always follow the pesticide labels and prevent pesticides from moving off-site

and damaging neighbors' crops, gardens and landscapes.

## **ON-FARM RESEARCH OPPORTUNITIES EXIST FOR SOUTHEAST NEBRASKA FARMERS**

I had the opportunity to attend the On-farm Research Reporting session last month in Beatrice. There were a number of projects reported on at the meeting; I believe over 70 projects. Here in southeast Nebraska we had a few on-farm projects conducted. Daryl Obermeyer, Nebraska Soybean Board member from Nemaha County has a cover crop research project being conducted on his farm. He is planting cover crops and determining their impact on the subsequent crop. Winter hardy cover crops are planted and compared to cover crops that winter-kill. In 2018 soybean planted following the winter hardy cover crop yielded significantly less than soybean planted following the cover crops that winter-killed. Corn yields were similar and not affected by the different cover crop treatments. This site is also an NRCS Demonstration Farm that will go for 5 years. Crop yields will be measured each year of the study. Stephen Kennedy, Resource Conservationist, USDA NRCS, and Aaron Hird, Nebraska Soil Health Specialist NRCS, collected soil samples for base-line soil data and at the end of the five-year period will collect samples to determine if this cropping system impacted soil health as well.

A project in Richardson County on the Keithley Brothers Farm evaluated yields from corn hybrids with different relative maturities to determine if there were yield differences. Small plot research at the University of Nebraska indicated shorter season hybrids yielded similar to longer season hybrids. If this were the case, cover crops could be planted sooner and have a better opportunity for establishment and more growth to increase soil benefits from the cover crops. Results of this study showed no significant differences between 105, 111 and 115 day corn, with 95 day corn yielding significantly less in 2017. A similar study was repeated in 2018, except relative maturities for the corn evaluated included 95,99,105,111 and 114 day corn and the study was replicated 6 times. Unlike 2017, the longer relative maturity hybrids each yielded significantly higher than shorter season hybrids. Corn yields were 179, 176, 198, 209 and 226 bu/ac for the 95,99,105, 111, and 114 day hybrids respectively. A relative maturity soybean variety was also conducted on the Keithley Farm. Group 1, 2, 3, and 4 soybeans were planted. Results showed Group 2 soybean maturity yielding the highest numerically, but not significantly different than the Group 3 or 4 soybeans. They did yield significantly higher than Group 1 soy-

beans. Yields were 47,58, 52 and 54 bu/ac for Group 1,2,3 and 4 soybean maturity groups respectively. We hope to repeat these two projects in 2019.

These are just a sample of the many on-farm research projects we have in Nebraska each year. The on-farm research program has been conducted across Nebraska with Nebraska Extension for several years. This program is expanding and getting stronger with support from the Nebraska Corn Board and Nebraska Soybean Board. In 2018 about 80 on-farm research projects were conducted in Nebraska. These research projects cover products, practices, and new technologies that impact farm productivity and profitability. To find out more about the on-farm research program go to:

<https://cropwatch.unl.edu/on-farm-research> .

Consider this an invitation to partner with the Nebraska On-Farm Research Network to secure and work with 2019 on-farm research projects.

1. You select a topic which you feel is important and needed in providing answers in your growing region. We will work with you to establish a plan on how to plant and harvest the study using your own equipment. Nebraska On-Farm Research can also assist as needed throughout the year.
2. We have developed protocols for a number of study topics that focus on areas of critical importance to crop production (including nitrogen, irrigation, and planting population studies). A number of new and revised research protocols are being developed and will be posted soon. These protocols are self-contained and include an example treatment map. Here is the link to the protocols: <http://cropwatch.unl.edu/farmresearch/protocols> .
3. We are making arrangements for industry partnership studies in the 2019 growing season.

If interested in participating in these studies, please contact

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[nathan.mueller@unl.edu](mailto:nathan.mueller@unl.edu) or
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for specifics on the above.

If you interested in conducting any on-farm research, feel free to contact me, Gary Lesoing. I am the Extension Educator in southeast Nebraska who is a member of the On-Farm Research Network. You can reach me at (402) 274-4755 or [glesoing2@unl.edu](mailto:glesoing2@unl.edu).



## SHOULD LEASES BE ADJUSTED FOR FLOOD DAMAGED GROUND?

Where there is significant damage from flooding to cropland, should the rental rate be adjusted for 2019? The answer lies in the characteristics of the individual situation. This article provides guidance on adjusting rental rates for flood-damaged land with different lease characteristics.

### How bad is the damage and who is going to fix it?

Flood damage can be categorized into two distinct types. One is the 'hard' work and the other is the 'heavy' work:

- The 'hard' work will probably not be avoided. This usually includes quite a bit of hand labor and light work with equipment to remove branches, corn stalks, trash debris and other obstacles deposited on the field.
- The 'heavy' work may not need to be done at all. This work includes heavy equipment like bulldozers, scrapers or graders to take care of major problems. It might include moving topsoil, removal of sandbars, and fixing holes, gullies, and ruts from the flooding.

In both cases, the party primarily responsible for completing this work is the landlord. The landlord bears the responsibility for providing the tenant with the land ready to farm. Desiring a positive long-term landlord/tenant relationship and knowing the work needs to be done in a timely fashion, most tenants are probably going to provide most if not all, of the 'hard' work described above. When that happens, is it appropriate for the landlord to acknowledge that effort? Most would say yes.

### Should rental rates be adjusted?

#### *Crop Share*

If the land lease arrangement is a conventional crop share, the rental rate may not need to be adjusted. Since the crop share lease arrangement shares production risk between the landlord and tenant, if the production varies, the amount received from a share varies based on production. Crop insurance policies contain preventative plant provisions which could lead to an insurance payment, even though nothing was planted. This will only apply to those with an insurance policy and payment size, if any, depends upon the rules contained in the preventative plant provisions. We encourage those with crop insurance policies to contact their agent about preventative planting rules.

#### *Cash Rent*

For cash rents, is it appropriate for the landlord to receive a full cash rent payment for 2019, if the land has flood damage? Due to the language in the lease contract, full payment will likely be expected. However, is that equitable to both parties? Good landlord and tenant communications will be key to deciding equitable payment for 2019. Begin that conversation now instead of waiting until the end of the production year. Waiting will likely result in a hardship with at least one of the parties. The language contained in the lease needs to be examined. If the lease does not specifically address weather-related events prior to planting, the amount paid might vary. Under contractual law, if an event renders the property unusable for the entire growing season, the tenant may have a case for vacating the premise and not

making any lease payments for 2019. Seeking release from a property under these terms may have a devastating effect on the relationship between the tenant and the landlord (even the neighborhood) in the future.

One suggestion for adjusting cash rents in 2019 is to look at some way to adjust cash rent based on actual productivity. Another possibility is to use some measure of total revenue on a per acre basis. Setting up some type of flexible cash rent that takes into account the date of planting, damage to topsoil, sand deposits, and other aspects that might affect yields. Check with your local Agricultural Economics Extension Educator for ideas to accomplish this.

### Do you have crop insurance?

The other issue with cash rental rates relates to the holder of the crop insurance policy, which is the tenant. The tenant may consider assisting the landlord in the 'hard' and/or 'heavy' work by contributing preventative planting payments to cleaning up flood damaged farmland.

For crop share rents, both the landlord and tenant could have crop insurance, which will likely include a prevented planting coverage. For either type of rent, have good communications with your insurance agent.

In addition, Good communications between the landlord and tenant on issues like this will go a long way towards an amicable resolution.

Also be sure to visit with the Farm Service Agency to understand any implications on changes to the crop lease agreement.

### For government help, be sure to document

There will be situations where the cost of doing both the 'heavy' and the 'hard' work can be documented and submitted to Farm Service Agency for Emergency Conservation Program payments. The key point is that documentation should include pictures (before and after), tracking equipment used, supplies, and labor.

If you are modifying your rental agreement for 2019, get it in writing. Stress may be high, you will want to make sure both parties are fully aware of what they are agreeing to. In summary, 2019 may be the year that both parties need to share the pain of the March flooding. Good communications between landlord and tenant is probably the only sure way that both parties are satisfied with the results of the lease.

If you would like to visit about this issue, the team of Extension Educators working in Agricultural Economics can help:

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## NEBRASKA EXTENSION OFFERS RESOURCES TO FLOOD VICTIMS

Those affected by the flood are likely unsure of where to begin. Extension encourages individuals returning to homes and properties to first take steps to ensure their safety. When a home or building is flooded, there is likely damage to the structure. Buildings need to be thoroughly dried, and before drinking water it is critical to test domestic wells for bacteria. Also, be cautious when working in and around contaminated floodwater.

Extension has compiled a list of the state's certified public health environmental laboratories where homeowners can obtain a water test kit. This information is available on Nebraska Extension's flood resources website, <https://flood.unl.edu>, which serves as a resource hub for families, homeowners, businesses and producers facing flood clean-up. New and updated information will be added to the site on an ongoing basis.

Tips for homeowners facing food-safety concerns after the flood can also be found on the flood resources website. This includes guidelines to help people decide when to throw out food and how to disinfect food that can be saved. For instance, screw-topped or crimp-topped jars or bottles of food that have come into contact with floodwaters should be thrown out, even when the jars have not been opened.

Extension is also a resource for those wanting to help flood victims. The Eastern Nebraska Research and Extension Center near Mead and Haskell Ag Lab near Concord are serving as donation locations for hay (large bales) and fencing materials for livestock owners and managers impacted by the flood. Those wishing to obtain the donated materials should contact the Nebraska Department of Agriculture.

"We're partnering with a number of state agencies and organizations to do what we can to help those who need it most," Hibberd said. "We're all in this together."

For the latest flood resources from Nebraska Extension, visit the flood resources site or follow @UNLExtension on Twitter.

Here in southeast Nebraska we also have the issue of increased traffic due to the closure of I-29 and a number of other roads. Similar to the flood of 2011, Highway 75 is extremely busy with a tremendous amount of truck traffic. Please be careful when driving on these busy highways! A couple of weeks ago there were multiple accidents on Highway 75 south of Auburn, NE, with one fatality. Also as we move into spring and field work will be starting again, be aware of farm machinery travelling on the highways and county roads. Give all your attention to driving! If you have any specific questions, feel free to call our office at (402) 274-4755 or stop by at 1824 'N' St. in the courthouse basement in Auburn.

## COPING WITH STRESS DURING A CRISIS

With difficult weather conditions and ag economy affecting a large portion of the state, here is an article by Brandy VanDeWalle, Extension Educator in Fillmore/Clay Counties.

### *Coping with Stress During a Crisis*

*By Brandy VanDeWalle,  
March 20, 2019*

With the flooding and blizzard conditions affecting a large portion of the state, I looked up some Extension resources and decided to write some of the research ideas for dealing with stress and how to help the whole family cope. First of all, our Nebraska Extension publication, *Effective Management of Stress & Crisis* points out numerous tips that come from worldwide research on strong families. It involves research from more than 24,000 family members in 35 countries. While the publication identifies 18 ideas, I selected the top ten that interest me. For the remainder of the ideas, go online to the publication which can be accessed through our [extension.unl.edu](http://extension.unl.edu) website and search for "Effective Management of Stress & Crisis."

Ideas for coping with stress and crisis include:

- Look for something positive to focus on in the difficult situation and focus on it.
- Keep things in perspective. "These things too, shall pass."
- Pull together rather than apart. Don't see the problem as an individual's problem but as a challenge for the whole family.
- Focus on what is most important and minimize fragmentation. Without focusing on the essentials, the details, details can get you edgy, even hysterical.
- Go with the flow to some degree. Sometimes you are relatively powerless in the face of crisis. At this point it can be useful to simply tell yourself to "let it go."
- Know how to laugh and know how to cry, for both are essential to maintain an emotional balance in life.
- Create a life full of meaning and purpose. All people face severe crises in life. You will not be able to avoid these challenges. Rather, your aim can be to live a useful life of service to your community. This brings richness and dignity to your life, in spite of the troubles you endure.
- Realize that suffering can be a catalyst for positive growth. Crisis, by definition, is a difficult time in your life. However, it also can be a turning point, planting the seeds for a satisfying and successful future. This is hard to internalize but useful to remember.
- Identify spiritually with the grand procession of life: Through good times and bad, we, as individuals, come and go, but life from whence we all spring is eternal. There is something satisfying and soothing about that thought.
- Get help outside the nuclear family when needed. Seek help from extended family members, supportive friends,

neighbors, colleagues, members of your religious community, professionals in the community, or others. In a manner of speaking, it takes a whole village to resolve a crisis.

While it might be "easier said than done" to follow the above strategies, giving every effort to embrace a positive approach to deal with a crisis will help you and your family more effectively handle the situation at hand. Disasters, whether natural or human-made leave today's families facing difficult times. Our ranching and farming families have especially been impacted by the recent floods and blizzards. Let's remember to pull together as a state and help our fellow Nebraskans through this difficult time, as the recovery and rebuilding process will take a long time.

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