Custom Rates Expected to Jump 7 Percent in 2019

AMES, Iowa – Prices for performing custom work are expected to jump in 2019, according to data gathered by Iowa State University Extension and Outreach economists. The 2019 Iowa Farm Custom Rate Survey showed a 7 percent price increase across all surveyed categories.

Changes from 2018 to 2019 varied across categories, with complete harvesting and hauling for corn and soybeans increasing by 6 percent and hired labor going up by 7 percent.

The survey received input from 121 farmers, custom operators and farm managers to determine estimated pricing for custom work. Custom rates are provided for tillage, planting, drilling, seeding, fertilizer application, harvesting, drying and hauling grain, harvesting forages, complete custom farming, labor and both bin and machine rental.

The reported rates are expected to be charged or paid in 2019, including fuel and labor. The average prices for diesel fuel was assumed to be $2.94 per gallon. The values presented in the survey are intended only as a guide.

There are many reasons why the rate charged in a particular situation should be above or below the average. These include the timeliness in which operations are performed, quality and special features of the machine, operator skill, size and shape of fields, number of acres contracted and the condition of the crop for harvesting. The availability of custom operators in a given area will also affect rates. Any custom rate should cover the cost of operating the farm machinery (fuel, repairs, depreciation, interest) as well as the operator’s labor.

For a copy of the 2019 Custom Rates Survey visit your local Extension Office.

Article Authors: Alejandro Plastina, Extension Economist/Assistant Professor in Economic & Ann

African Swine Fever Virus

African swine fever virus (ASF) is a serious, highly contagious, viral disease. Recently, several cases of ASF have been confirmed in numerous Chinese provinces. U.S. swine industry organizations are working continuously on prevention and response to help keep ASF out of U.S. pig farms. ASF cannot be transmitted to humans, so it is not a public health or food safety concern. However, it can spread rapidly in pig populations by direct or indirect contact, and there is currently no vaccine or treatment. That’s why it is essential for the U.S. swine industry to be well informed and well prepared should an ASF outbreak ever reach the United States.

For more information on African Swine Fever Virus visit [https://www.ipic.iastate.edu/AfricanSwineFever.html](https://www.ipic.iastate.edu/AfricanSwineFever.html) or contact your local ISU Extension and Outreach Swine Specialist.
Management to Prevent Calf Scours

Cold and wet weather have added to the calving challenges of Iowa cow-calf producers. Iowa State University Extension and Outreach beef specialist Beth Doran said both are ideal conditions for contributing to calf scours.

“There’s no magic bullet in preventing calf scours, but one key is to provide a clean, dry and draft-free environment,” she said. “That is tough to do given the weather we have had.”

Doran recommended providing shelter for the calves such as a portion of a shed dedicated for calves to get away from their mothers or a portable calf shelter. While this area needs to be draft-free, natural ventilation is still necessary to reduce humidity, and calves need bedding, such as straw, poorer quality hay or chopped cornstalks, to nestle down in.

“Getting colostrum into the newborn calf is extremely important in preventing calf scours because it provides antibodies to the calf,” Doran said. “Once the first 24 hours has lapsed, the absorption of antibodies ceases. The goal is to provide two quarts to the calf in the first two to six hours after calving, plus another two quarts in the remaining time. Ideally, the calf will nurse on its own, and intervention is not needed.”

"However, not all colostrum is equal," she said.

The best colostrum is that which is provided by the calf’s mother, as it contains antibodies specific to the calf and its environment. If this isn’t possible, other sources include colostrum from other cows in the herd, a colostrum replacer or a colostrum supplement. Obtaining colostrum from other herds is not recommended for reasons of biosecurity.

One prevention strategy is pre-calving vaccination of pregnant cows and heifers, which increases antibody levels in the colostrum. If this is not doable, there are oral and injectable vaccines that may be administered at birth to the calf.

Last, but not least, try to segregate expectant cows from cow-calf pairs. For most Iowa producers, this involves bringing close-up cows into the calving area and moving pairs out of the calving area into a clean area as soon as possible. After each calving event, the calving area should be thoroughly cleaned.

The old adage, “Prevention is worth more than a pound of cure,” aptly applies to calving and managing calf scours, Doran said. May the weather soon warm, the ground dry up and your calves be butting heads with each other!

Photo credit: Steve Oehlenschlager/stock.adobe.com Article Author: Beth Doran, Extension Beef Specialist

Developing New Farmers

Young and beginning farmers face many hurdles in entering the agricultural industry and growing their farm operations. Financial constraints, time limitations and communications skills often complicate the growth and asset transition plans of young farmers and farm families. Beginning farmers are also unique in their collective organization, family structures and goals. Yet they need education, skills and experiences to help them sustainably and profitably grow their operations. According to the 2012 Census of Agriculture, 28 percent Iowa’s farmers are over age 65 and there are four times more farmers over 65 than under 35 years of age.

Iowa State University Extension and Outreach is responding to the needs of young and beginning farmers by facilitating Young and Beginning Farmer Peer Groups. The outreach effort supports beginning and retiring farmers as well as military veterans interested in farming by providing topical education with ISU and other resources. Several Iowa commodity and community partners are also involved in the peer effort.

The existing peer groups have been an excellent venue for young farmers to grow through business education, peer mentoring and social networking. ISU Extension and Outreach livestock, crop and farm management specialists are active in working with local peer groups over the past seven years. Peer group participants enjoy the concept of the peer learning led by ISU and plan to intensify their farm activities through the programs and workshops. A local group exists in Wapello and surrounding counties.

Contact Colin Johnson for more information, 515-291-9287 or colinj@iastate.edu.

Article Authors: Colin Johnson, Swine Field Specialist
Anhydrous Ammonia Application -- Spring 2019

It was a late harvest in fall 2018. Soils were wet and frozen when it was time to apply anhydrous ammonia. Those situations resulted in much less than normal anhydrous ammonia application last fall. Therefore, considerable anhydrous ammonia needs to be applied this spring. There is only so much capacity to switch from one nitrogen (N) fertilizer product to another. In Iowa, historically the two largest N fertilizers are anhydrous ammonia (largest) and urea-ammonium nitrate (UAN) solution, with granulated urea a distant third.

What should be considered if there is a tight window of time between ammonia application and corn planting?

1) Application procedures are key to avoiding injury to corn seedlings. Deep injection (6-8 inches) and a good seal of the injection track are the best ways to avoid ammonia placed in or movement into the corn root zone.
   - Ammonia has a greater opportunity to move from the initial injection site in coarse, dry, or cloddy soils.
   - Ammonia movement up the injection track can be greater if soils are wet and the injection system smears the sidewalls.
   - If you can smell ammonia after an application pass, adjust equipment or wait for better conditions.
   - Wing sealers immediately above the outlet port on the injection system can help close the injection track, limit the size of the retention zone, and reduce vertical movement of ammonia.

2) Adjust planting plans to help reduce the opportunity for crop injury. There is no magic number of days to wait to avoid injury; time will help, but won’t prevent injury. However, other precautions can be taken:
   - Do not plant directly over ammonia injection tracks.
   - Using GPS technology to offset planter rows 4-6 inches or more from ammonia injection tracks to avoid root/seedling injury.
   - Ammonia applications on an angle from the direction of crop planting is a way to reduce crop row-length exposure to ammonia bands.
   - Reduced application rate and narrower band spacing reduces the concentration of ammonia in each injection band.
   - If the injection zone is offset away from future corn rows, an application can be done the same day as corn planting.

3) The chance for crop injury increases with higher application rates due to greater ammonia concentration and a larger retention zone. If the injection point is 6-8 inches in depth, the outer edge of an ammonia retention zone (which would be low in ammonia concentration) could be four inches from the point of injection, and with seed planted at a 2-inch depth directly over an ammonia track, then the seed would be outside but close to the outer edge of the applied ammonia band. Shallow injection, greater movement upward from the injection point, wider spacing (greater rate per injection point), and higher rates are situations that could lead to greater chance of root/seedling damage.

4) Anhydrous ammonia can be applied sidedress. It takes equipment (applicator and nurse tanks) that is set up to travel between corn rows. As long as the injection track does not cause soil to cover corn rows (not yet emerged or emerged plants), then sidedress application can begin right after planting and until corn is too tall to get application through the field. Considering sidedress application helps widen the window of ammonia application and will help lessen short-term product supply issues.

For more information visit https://crops.extension.iastate.edu/cropnews or contact your local Extension Office.

Article Author: John Sawyer, Professor of Agronomy

Food Box Program 2019

Would you like fresh, locally-grown produce delivered directly to your workplace every other week? The Produce with a Purpose program will do just that. The purpose is to address the need for more local food producers and increase access by customers to local food in and around Wapello County. They have three goals in mind: Increase the number of fruit and vegetable producers in a six county region, increase the number of consumers who purchase local foods in Wapello County and provide high quality, relevant educational opportunities to producers and consumers. The cost is $15 per box and you can pick up at the Wapello County Extension Office or for employees employed at specific businesses listed on our website. For more information, check out https://producewithapurpose.com
Spring Manure Application

As temperatures rise and spring finally makes it way to Southeast Iowa, spring manure application is high on some producers’ to-do lists. There are a couple of things that these producers should consider to prevent water quality impacts and limit compaction in their fields.

A reminder that the law prohibits application of liquid manure from a confined animal feeding operation with more than 500 animal units until April 1 when certain winter conditions apply, such as frozen or snow-covered ground, unless prior approval by the Iowa DNR has been granted. This rule does not apply to small animal feeding operations or to dry manure, however all manure application should not harm water quality of state waters.

This means that applicators need to pay attention to the weather forecast and conditions of their fields.

Research has demonstrated that the greatest risk of manure nutrient loss occurs with large runoff events of either precipitation or snowmelt when the soil is still frozen and has low permeability. A good tool to check the general soil conditions in your area is the ISU Iowa Environmental Mesonet (IEM): https://mesonet.agron.iastate.edu/agclimate/#tmpf. On the ISU IEM page, you can see the soil conditions at weather stations close to you by either, 1) checking county soil temperature maps, or 2) plotting a time series of soil moisture and temperature.

The soil frost in Southeast Iowa was likely shallower this year than in many years, due to insulation from snow cover this winter. Observing data on the ISU IEM, we can see that as of March 22, all the southeast region stations recorded soil temperatures above 32 degrees Fahrenheit at the 50-inch, 2-ft, 1-ft, and 4-inch measurement depths. It is still important to check your field conditions prior to application, however, as you may find localized areas of low permeability and frozen soil moisture.

Check the weather forecast to avoid manure application prior to a rainfall event. The more time that the manure has to react and stick to the soil, the more stable those manure nutrients become. Producers also need to pay attention to how wet their fields are. Applying manure on wet soils can cause manure runoff as well as soil compaction. Wet soils have less room to infiltrate and hold liquid manure, making manure runoff from fields more of a concern. Additionally, when soil moisture is above field capacity, you run a high risk of compaction from manure application.

Choose the driest fields with well-drained soils and limited slope to apply manure on first. Follow the contour with manure injection equipment to prevent manure from running down slope within the injection band in wet soils. If your fields are just too wet for manure application, consider moving manure to another available storage area when possible. Also consider not filling tankers to their full capacity to limit weight.

Are tiles running in your field? If so, try to wait until soils have dried and tiles have stopped running before applying manure, as some of your manure nutrients may be lost to leaching. Also, tiles running usually indicates that your soils are at or above field capacity and compaction is of greater concern.

Getting a more days with sunny and windy conditions will certainly be helpful in drying out fields to create better conditions for manure application.

Hydrogen Sulfide safety series:
Monitoring: https://store.extension.iastate.edu/product/15106
Manure Agitation: https://store.extension.iastate.edu/product/15107
Swine Barn Ventilation: https://store.extension.iastate.edu/product/15109
Sample manure ahead of pumping to utilize all nutrients and not over/under apply: https://store.extension.iastate.edu/Product/pm1558
How to interpret your manure analysis: https://store.extension.iastate.edu/Product/pm3014
Using manure nutrients for crop production: https://store.extension.iastate.edu/Product/pmr1003

Article Authors: Kristina TeBockhorst, Ag Engineering Field Specialist
Spring Cover Crop Termination

Spring weather has finally arrived, and fieldwork will begin soon. Iowa State University research suggests cereal rye should be terminated at least 10-14 days prior to planting corn, so the favorable weather forecast may allow some farmers to begin terminating overwintered cover crops in the next few weeks.

Herbicides provide the most flexibility and consistency in cover crop termination, but they do not come without risks. Cover crops generally have a dense canopy of rapidly growing plants in the spring. That, combined with cool temperatures typical of that time of year leaves opportunity for termination failure. Herbicide choices for spring cover crop termination are relatively few, and limited information is available to determine the effectiveness of burndown treatments on less common cover crop species.

Dr. Kevin Bradley, University of Missouri, found that hairy vetch, cereal rye, and Austrian winter pea were relatively easy to control with herbicides. Other species, including annual ryegrass, wheat, and crimson clover, were more difficult to control.

Glyphosate provides the most consistent control of grass cover crops, but paraquat may work in certain situations. Glyphosate generally provides more consistent control in early spring under variable weather conditions than paraquat. Neither Group 10 (glufosinate/Liberty) nor Group 1 (Assure II, Select, etc.) herbicides have provided consistent control of cereal rye.

The less than ideal weather conditions can inhibit herbicide effectiveness. The following tips may help when planning your spring sprays.

1. Whenever possible, spray midday in sunny conditions when daytime temperatures are above 60 F, the cover crop is actively growing, and nighttime temperatures will be above 40 F.

2. Avoid skimping on herbicide or adjuvant rates during the cool spring conditions typically encountered during cover crop termination. Glyphosate at 1 lb.a.e./acre with AMS-treated water is suggested for best control of cereal rye; other species, like annual ryegrass, may require higher glyphosate rates.

3. Follow herbicide label instructions for appropriate adjuvants, mixing order, and application instructions including spray volume, nozzle type, and environmental considerations. Increased spray volumes (15-20 GPA) may help improve coverage in dense canopies.

4. The use of off-label adjuvants and inclusion of additional herbicides may reduce spray efficacy. Antagonism is sometimes observed with certain tank-mixes or termination timings but not others, so consulting the available research may be useful.

5. Check herbicide labels for restrictions to planting corn or soybeans following application in order to avoid injury to your cash crop.
Challenging Weather in Early 2019 Impacts Beef Production

The extreme weather of early 2019 has contributed to several potential issues for Iowa beef producers. The following is a list of common problems and a few thoughts on ways to address them.

Calf health – Calf morbidity and mortality may be greater than usual due to dystocia, weather exposures, scours, navel ill, etc. There are no surefire solutions but there are things you can do to promote calf health. Check cows frequently for calving problems as the cold winter may have contributed to larger calves and greater risk for dystocia. Strive to create clean, dry calving areas and work to ensure calves get adequate colostrum. Consider implementation of a modified Sandhills Calving System by moving remaining pregnant females to a new calving area. A calving area with less mud and without pathogens shed by older calves can reduce risk of scours and other infections in newborn calves.

Cow condition – It is very possible that some cows lost body condition this winter. These cows will require extra groceries in order to regain that condition, especially during lactation. Cows in poor body condition may require a longer post-partum interval before they are able to cycle and conceive. It may be necessary to supplement through early and mid-lactation in order to promote improved body condition and improve the odds of successful breeding. It can be challenging and expensive to improve body condition during lactation but for thin cows with calves at side, alternatives are limited. Without supplementation, they are unlikely to gain condition and thus may be unlikely to breed.

Cows that have lost calves – These cows will need to go through a post-partum recovery period and will continue to be on a similar breeding schedule as their lactating counterparts. It is often not economical to hold them over for an entire year but other desirable options are limited. Market cow prices may be low for some time due to an over-abundance of these cows going to market. Grafting orphan calves can be challenging and there are significant biosecurity risks associated with bringing in calves from other herds. Perhaps feeding these cows while watching the market cow price is a reasonable approach. If and when those prices improve, cows can be marketed or it may play out that keeping them is a better option.

Pasture conditions – Many calving pastures and winter feeding areas have probably been turned up-side-down as cattle traversed the wet ground. Depending on the forage species and the extent of damage, these pasture areas may come back naturally but will require at least a good deal of rest and time. In some instances, producers may benefit from working to restore and renovate those areas. Leveling the ground and reseeding may be appropriate in some cases.

Flooding – Rapid snowmelt and spring rains have caused instances of stored grain being covered with floodwater. According to current Food and Drug Administration policy, grain inundated by uncontrolled river or stream water is considered adulterated and must be destroyed. Keep in mind that for any flooded feed, there is potential for exposure to many contaminants through the water. This following is a link to a recent news release by Charles Hurburgh and Dan Loy regarding several aspects of dealing with flooded grain.

https://www.extension.iastate.edu/news/management-guidance-flooded-grain

Additionally, pastures and hay fields damaged by flooding may require some rest and renovation in order to restore productivity.

ISU Extension and Outreach has many flood-related resources. The following is a link to the Iowa Beef Center list of flood-related resources. We are in the process of updating materials and adding to this list so check back frequently and do not hesitate to contact your ISU beef specialist for more information. http://www.iowabeefcenter.org/floodresources.html

Update for Veterinarians Program:

The annual “Update for Veterinarians” program organized by Iowa State University’s Iowa Beef Center features a full day of education focused on beef cattle production. Iowa State University Extension and Outreach beef specialist, Chris Clark is organizing the program and invites practitioners who work with cattle to make plans now to attend the June 11 event at the Iowa State University McNay Research Farm near Chariton.

In addition to updates from the ISU College of Veterinary Medicine and the ISU Veterinary Diagnostic Laboratory, the program will include presentations on the dos and don’ts of writing health papers, animal welfare, and nutritional management of cows in poor body condition. This program is an opportunity for veterinarians to get quality continuing education on various beef cattle topics.

A detailed agenda is being finalized and promotional materials will soon be available. Please contact Chris Clark at 712-250-0070 or by email at caclark@iastate.edu for further information.

Article Author: Chris Clark, Beef Field Specialist, caclark@iastate.edu
Would you like to receive the Ag Newsletter electronically?
Call 641.682.5491 or email jessh@iastate.edu and provide your email address!

Stay Informed - www.extension.iastate.edu/wapello