Custom Farming Survey for Iowa Shows Slight Decline in Rates

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AMES, Iowa – Custom farming can provide an additional source of income for those with machinery and experience, or alleviate a farmer of a particular task that they do not wish to do on their own.

Whether the farmer is performing or receiving the custom work, the question always comes up over what to charge. And while rates vary from one operator to another, a new report by Iowa State University Extension and Outreach provides a look at projected averages for 2020.

In addition to field activities, the report also includes prices for commodity storage, snow removal and farm maintenance, equipment rental and labor prices.

"Subdued commodity prices, lower fuel prices and another year of thin profit margins in crop production in the horizon are setting the tone for overall lower expected custom rates in 2020," said Alejandro Plastina, assistant professor and extension economist with ISU Extension and Outreach. "However, some tasks related to manure management might see some price increases, according to the survey respondents."

“This report is not to be interpreted as Iowa State University’s opinion of what the custom rates are or should be, but rather what survey respondents report thinking the rates will be in 2020,” he said.

To read the complete article go to: https://www.extension.iastate.edu/news/custom-farming-survey-iowa-shows-slight-decline-rates

Additional publications on machinery, including how to estimate specific machinery costs and historic days available for fieldwork can also be found through the Ag Decision Maker website, https://www.extension.iastate.edu/agdm/cdmachinery.html.
Spring is the time of the year in Iowa when Iowa’s landscape awakens from winter’s cold and the remaining snow and ice melts. In most years, ponds survive winters with minimal issues. However, there are those rare occasions that pond owners see a number of dead floating fish in the pond. Although the fish may look like they just died, they likely actually died prior to the spring thaw. This fish loss is often referred to as a Winterkill. Winterkills result from low winter dissolved oxygen levels. Shallow nutrient-rich ponds often have high amounts of aquatic vegetation going into the winter (decaying vegetation takes up oxygen) and are more susceptible to winterkills. Excessive aquatic vegetation comes from both the shallow depths and nutrients. Shallow depths can be managed by removing sediments around the pond parameter by using backhoes but the costs are often high. The best solution to both is to control nutrients and sediments is through sound watershed management practices that include buffer strips. The mere presence of aquatic plants does not necessarily mean that control measures be adopted. Instead it is the amount of aquatic vegetation and their decay during the winter that can cause winterkills.

Although first reaction that a pond owner might be that all of the fish are dead and that the pond needs to be restock with all new fish there might still some fish that survive. If the dead fish census only consists of largemouth bass and bluegills and not channel catfish, there might be some remaining fish as those species are more susceptible to low dissolved oxygen than channel catfish.

To check for possible largemouth bass and bluegill survival, the pond owner should wait until late May or early June and sample the ponds for these fish with a common seine, sometimes referred to as bait seine and is often available are larger farm supply stores. To seine a pond, select a shallow area of the pond, 2-4 feet deep, and pull the seine along the pond edges with a companion. If no fish are collected and you are not able to catch any fish later in the year, you will likely have to restock the pond with new fish. There are a number of private aquaculture farms in Iowa that you can contact for stockers.

Another solution to winterkills uses aeration in summer, fall, or winter. Fall or summer aeration reduces the amount of decomposing organic wastes that results in decreased oxygen demand in the winter. Winter aeration may be dangerous due to the resulting hazardous opening in the ice or management practices during inclement weather. It is important to match a suitable aeration device to the appropriate pond size to maximize aeration.

Finally, sound pond management is similar to the care used by homeowners for their yards in that the best ponds are those that have maintenance done a regular basis.
Hoop Structures for Swine
Leopold Center for Sustainable Agriculture

Pork producers in the United States who are looking for lower cost structures for raising pigs have shown a great deal of interest in hoop barns or hoop shelters as facilities for housing swine. Hoop barns can be used successfully for gestation and finishing of swine, and increasingly for other livestock as well. In order to implement hoop designs successfully, producers need to be aware of the advantages and disadvantages of this type of housing weighed against those of traditional facilities.

Keys to Success
Like all undertakings, investing in hoop structures requires careful consideration of several critical factors. Research, as well as common sense, dictate the following keys for success in managing hoop structures.

Bedding, bedding, and more bedding. Dry bedding is the main key to success. Most animals tolerate cool environments but humidity or ammonia can cause respiratory diseases. Finishing of pigs in hoops requires an average of approximately 200 lbs of corn stalk bedding per finished pig, with more in winter and less in summer. About 1 ton of bedding per year per gestating sow space is required.

Keen observation. Finding sick animals in a group of 150 to 200 is a challenge. Walking through the animals and watching them for warning signs is important daily routine.

Start-up after construction. Placing animals in hoops once the ground has frozen can result in mortalities from piling and slow growth due to thermal discomfort. Place bedding on the ground to prevent freezing, even if it means bedding weeks in advance of pig placement.

Handling facilities. Sorting animals for sale or treatment from a large group is a challenge and generally requires more than one person. Give forethought to how sorting will occur.

Water. Waterers need to be frost-free. Buildings will sometimes reach below-freezing temperatures. Additional waterers may be needed in the summer.

Feeder space. Traditional recommendations are 1 feeder hole per 4 or 5 pigs. Observations indicate that this may be increased to 5 or 6 pigs per space. Pig observations will dictate the proper level.

Fresh air. Hoop structures are naturally ventilated, unheated facilities. Closing the ends too tightly during winter will result in high humidity and poorer air quality. General practice in Iowa is to close the north end during the winter, leaving the south end open. During the summer, both ends are open for maximum air flow.
Transplanting Small Trees
By Richard Jauron, Department of Horticulture

Occasionally the need arises to move trees within the home landscape. Early spring (before growth begins) and fall (after leaf drop) are the best times to transplant deciduous trees. Evergreens are most successfully transplanted in early spring and late summer (late August to mid-September).

To minimize damage and improve their chance of survival, dig and move trees with balls of soil adhering to portions of their root systems. The soil should be moist when the plant is dug. If the soil is dry, thoroughly water the area 3 to 4 days before digging. When digging trees, the radius of the root ball should be approximately 8 to 12 inches for each inch of trunk diameter at chest height. For example, a tree with a 1-inch-diameter trunk should have a soil ball that is 16 to 24 inches in diameter. Using a spade, dig a trench around the tree to a depth of 1½ to 2 feet. Then cut beneath the roots, rounding the bottom of the soil ball. Tip the soil ball to one side, place a piece of burlap in the trench on the opposite side, then carefully tip or roll the soil ball over onto the burlap. Tightly wrap the burlap around the soil ball and secure the burlap with twine. Move the tree by lifting and carrying the root ball rather than grasping the trunk.

If possible, replant the tree immediately. Dig a hole that is 2 to 3 times the width of the tree’s root ball. The depth of the hole should be approximately 1 to 2 inches less than the height of the soil ball. Carefully lower the tree into the hole, position it correctly, and begin to place soil back into the hole. Firm the soil around the tree’s root ball with your hands. When the hole is about two-thirds full, cut and remove the twine around the soil ball. Also, cut away the exposed portion of burlap. Then complete the backfilling of the hole and water thoroughly.

Do not allow the soil ball to break during the digging, moving, and replanting process.

Home gardeners should limit themselves to transplanting trees with a trunk diameter of 2 inches or less. Trees with a trunk diameter greater than 2 inches should be moved by an experienced landscape contractor or nursery professional.
Yield Considerations for High Speed Planting
Matt Darr, ISU Professor of Agriculture and Biosystems Engineering
Ryan Bergman, ISU Program Coordinator in Ag Technology

Recently Iowa State University (ISU) completed a five-year study of high speed planting technology using the Precision Planting SpeedTube and the John Deere ExactEmerge seed meter and seed delivery system. Both planters provided excellent singulation and spacing of corn while planting up to 10 miles per hour.

In agriculture, it is rare that a single technology will provide a guaranteed yield response every year. Although there are examples like section control, most ag technologies provide different levels of yield and economic impact depending on the growing season. When considering the yield benefits of high speed planting, it’s important to consider two areas where this new technology has an opportunity to enhance yields in a given year.

Plant Spacing and Skips
The most direct influence a planter row unit can have on yield is in its number of seed skips or unplanted seeds. A significant amount of skips will result in a net reduction in overall corn population. In testing conducted at ISU, we observed a significant increase in the number of skips at planting speeds of 7.5 miles per hour and greater when using a conventional vacuum seed meter, compared to a meter designed for high speed operation. The combination of skips produced at the seed meter and skips produced by excessive seed bounce in the drop tube often exceeded 10 percent for a conventional planter meter operating at 10 miles per hour.

Timely Planting
The economic benefit of reduced skips and improved corn spacing are only achieved when planting at high speeds. When operated at the manufacturer recommended speed of approximately 5 miles per hour, the majority of conventional planting systems can achieve high-quality spacing that will maximize yield.

Corn yield potential is influenced by planting date. Although the specific date range varies based on where you farm, all regions of the corn belt have date ranges that maximize yield potential. As corn planting extends beyond the optimal planting window, corn yield potential can drop by as much as 3 to 5 percent per week.

There are multiple ways to increase planting capacity and plant more corn within the optimal window. This includes using a larger planter, operating multiple planters or planting at a higher ground speed. Each producer decides how to optimize their own operation to balance logistics, cost and labor capacity. For many, choosing high speed planting technology is a way to maintain current equipment size while planting more acres per hour with the same amount of labor.

Soybean Survival Rate & Yield
In the high speed planting study conducted at ISU, we found soybean survival rates at harvest are higher when they are planted with a system that can singulate and maintain good spacing, even at high planting populations. The yield advantage of improved singulation and survival rate in soybeans ranged from 0 to 2 bushels per acre in a given year. Results where similar across seeding rates ranging from 100,000 to 160,000 seeds per acre which highlights soybean yield flex across populations. While this result does not suggest a guaranteed financial gain from yield improvement, it does highlight the potential of high speed planting systems, and specifically the improved seed delivery systems, to enable reduced soybean seeding rates to achieve the same at harvest plant density and yield.
Following CDC and Iowa State University guidelines regarding the Covid 19 virus, our meetings and events are cancelled or postponed until further notice. We will keep you informed on future developments. Stay healthy.