

Agricultural News from MSU Extension and AgBioResearch

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 Will that Grow Here seminar

Michigan State University



Commodity Marketing - Are you using risk management strategies?

I do not think I have ever heard anyone say, "prices are too high, I'm going to give some back." Even in 2014 I remember selling yearlings for over \$2/lb. Everybody took the entire check. Those are rare marketing opportunities and they did not come about through brilliant marketing strategies. They just happened. However, I do hear so often that prices are too low. Yet few producers I talk with about minimizing price risk implement any type of price protection.

One of the hard parts of utilizing price protection over time is that we remember the times we did not get top dollar, or that the market worked against us, and I had to pay margin calls or when I purchased price insurance and the market went up.

I am not trying to scare anyone, but I have an opinion that both the ag economy and our nations economy are going to see serious turbulence. And I do not mean that is going to bad overall. I think some people are going to make lots of money through it all. I also think some are going to lose a lot. I do not claim to know what is going to happen with prices, but I am pretty sure they will be changing quite a bit and incorporating price protection to minimize the chances that the market will work against us. I have been an advocate of the of the USDA-RMA Livestock Risk Protection program. It has paid to own it each of the last two years and looks like its going to pay again this year. I have not studied the Livestock Gross Margin program, but it offers protection from feed price increases.

Producers that are large enough can purchase puts and calls. I may times wish I were big enough to use them. I own some farm ground in Illinois, and it is farmed on shares. About 20 acres of soybeans and 20 acres of corn. Not enough bushels to buy puts, so I usually try to contract about half of my expected production by cash contract. Of course, I thought I was pretty smart when I contracted corn at over \$4.00/bushel and beans over 11, until about two weeks ago I could have locked in over \$6 and 15. I am good with 4 and 11. Some would be upset that they didn't hit the highs. I am just glad to be selling at a reasonable profit.

There are other marketing challenges. The number of producers selling directly to consumer has been increasing across the Upper Peninsula. I think we are about to see significant inflation and food costs are going to go up significantly. Unfortunately, that will not always be relayed onto the farmer. In these instances, cutting the middle marketer out will be of great benefit. There will be challenges. Small plant slaughter capacity is nearly full. Others geared up for markets that have been lost.

When Covid hit the packing industry last year, animals were being euthanized on the farm because the animals were harvest ready, but capacity was full. This caused a supply and demand situation which led to smaller aggressively contract marketing cattle. Once the slaughter capacity normalized, the small marketers had over contracted and dropped some of their established clients. Also, JBS in Green Bay had started procuring grass finished beef but are now slaughtering for other companies. However, they will only receive cattle coming in on semis. So smaller producers are challenged with trying to combine multi owner cattle loads to fill semis. I want to help if I can in these situations. If you have grass finished beef you would like to get onto a multi-producer load, please give me a call and I can help put you in contact with other producers trying to do this.

I think we are in for a wild ride of ups and downs and managing price and market risk will be critical. I highly encourage producers to investigate every option and implement risk management strategies. It is an area I have been increasing focus. If you want to discuss strategies, please, give me a call.

Volume 25 Issue 6

Economics of Improving Soil Health

By Frank Wardynski, MSUE

Soil health is a topic that has been long debated regarding its importance and even its definition. There are many agronomic management practices that farmers have used through time to maintain and improve soil heath to varying degrees of success. Planting cover crops, implementing conservation tillage systems and application of compost to agriculture fields are common practices used to improve soil health. These types of management practices have been well documented as having beneficial effects on soil health parameters such as soil microbial populations, humus and organic matter content, nutrient retention, and erosion control. However, it is difficult to demonstrate these benefits from an economic standpoint.

One popular method of evaluating management changes is to use partial budgeting. Partial budgets quantify the positive effects of increased revenues and decreased costs, as well as the negative effects of decreased revenues and increased costs associated with a given management change. The revenues and expenditures are annualized over time to account for intermediate and long-term purchases. One of the greatest challenges with using partial budgets is determining accurate predicted values.

Work conducted at Iowa State University by Plastina and Liu utilized partial budgeting to evaluate the use of cover crops in Midwest row crops. Table 1. Illustrates the values they assigned to partial budgets. Their findings indicate a net loss of \$21.79/acre when utilizing cover crops as compared to not using cover crops. The purpose of using this example is not to prove that cover crops are not financially feasible, but rather to demonstrate how partial budgets function and the challenges associated with proving that implementation of soil health management changes are financially profitable.

TABLE 1. Partial Budget for cover crops

Positive Effects: Negative Effects:

Increased Revenues Decreased Revenues

Increased Yield	\$8.27	None	\$0.0
Cost Share	\$11.73		
Grazing	\$0.67		
Total Increased Revenues	\$21.23	Total Decrease Revenues	\$0.0

Decreased Cost Increased Cost

		Annual Net Gain or Loss	\$-21.79
Total Positive Effects	\$24.54	Total Negative Effects	\$46.32
Total Decreased Cost	\$3.31	Total Increased Cost	\$46.32
		Increase Tillage	\$0.24
		Extra Nitrogen	\$1.65
		Extra Herbicide	\$0.48
Reduced Tillage	\$0.54	Increased Management	\$0.56
Erosion Reduction	\$1.10	Cover Crop Termination	\$2.72
Lower Nitrogen Fertilizer	\$1.00	Cover Crop Planting	\$20.27
Lower Herbicide	\$0.67	Cover Crop Seed	\$20.40

Making true improvements in soil health is a long-term process. Changing the soil significantly to increase organic matter, water holding capacity and other properties typically takes decades rather than years. Long-term change can potentially increase yields to a point that allows for consistent yield increases that will offset the cost associated with changing soil health. There are other factors to look at to increase revenue or decrease costs, such as negotiating lower land rent values with landowners that value stewardship management practices, and access to more government programs. Land owners can also place a higher value on erosion control.

Utilizing soil health management practices on land is often impacted by land ownership. It is easier to make long-term investments, such as practices that affect soil health, when the land is owned and controlled by the farmer. However, rented land brings challenges with these long-term improvements. Many parcels of land are rented short-term. This makes it difficult to invest in soil health management practices that may not show returns for 10-20 years. However, some landowners may be willing to negotiate rental prices if farmers are willing to invest resources into soil health improvement. Farmers should discuss these possibilities with landowners and be willing to incorporate this into a contractual agreement for reduction in cash rent prices.

Investing in soil health management practices makes sense from the aspect of evaluating various stewardship parameters. However, it can be difficult to justify those efforts from a purely economic standpoint. Producers should be challenged to utilize partial budgeting and evaluate the benefits needed to be assumed to breakeven. Tracking yields over time will help determine how well the investment is performing.

Potassium fertility impacts hay and pasture performance during drought

Low soil potassium (K) levels reduce a plant's ability to withstand stress from drought, disease, insects and winter damage. In hay and pasture, both grasses and legumes are negatively impacted by potassium deficiency. However, grasses are better able to extract potassium from low-K soils. Low soil K does not affect the quality of forages in terms of TDN and ADF, but it certainly can decrease overall yields, especially in stressful growing conditions. Soils with high potassium levels can result in "luxury" uptake by most forages, including grasses, resulting in high-K forage when fed or grazed. Low-K forages are useful in pre-calving transition diets on dairy operations to avoid hypocalcemia in early lactation, and can sometimes be sold at a premium price.

Hay and pasture performance has been hurt by drought this year across Michigan. Most of the northern areas have received more timely rain in late June and early July, but the damage has already been done and 2012 yields are badly reduced. Southern Michigan and most of the greater Midwest remain in the grip of a serious drought. If soil test information is available for your fields and pastures, check the potassium level on fields and pastures most severely affected by drought. Compare performance with fields that have adequate potassium levels.

In less stressful years, hay and pasture producers may get by with skimpy fertilizer applications. Everyone knows that nitrogen gives the best "bang for the buck" on grass hay and pasture. However, a drought year, hard winter or some other extreme stress factor can bring other management practices, including potassium management, into focus.

Farmers should have reasonably accurate estimates of forage yield and fertilize accordingly. It is also important to soil test periodically to get accurate plant nutrient availability information. Developing a strategy for potassium management can include adjustments to manure application plans, utilization of cover crops to capture and recycle soil K, and judicious use of commercial potassium fertilizers. "Crop removal" information for most Michigan field crops is readily available. If soil K is high enough, potassium fertilization may be deferred for a while as a cost-saving measure. But keep in mind that removing crops without replacing plant nutrients will "draw down" your reserves of available plant nutrients. Fertilizing to replace nutrients lost by crop removal is a good strategy to maintain current K levels. However, if your K levels are below optimum, then a strategy to build them up should help your future crops better withstand the next drought.

For more information, contact Jim Isleib, Upper Peninsula crop production educator, at 906-387-2530.

MSU wildlife damage survey reveals needs and priorities of Midwest farmers

By James DeDecker, MSUE

Conover (2002) estimated that wildlife-related economic losses to farmers and ranchers in the U.S. exceed \$4.5 billion annually. More recent research from McKee et al. (2020) estimated that annual losses of just soybeans (\$324M), corn (\$194M), and wheat (\$27M) to wildlife in the US total more than \$545 million. For comparison sake, weeds are estimated to cost the US agricultural economy approximately \$26 billion annually. Identifying effective solutions for wildlife damage is critical to agricultural sustainability, particularly in Midwest states where agriculture and wildlife commonly coexist.

In fall of 2019, the MSU Agriculture and Wildlife Coexistence Working Group, supported by the North Central IPM Centers, administered a survey of farmers to gauge needs and priorities related to wildlife damage management on Midwest farms. Two hundred and forty-three farmers responded to the survey, 195 from Michigan, 42 from Indiana, as well as a handful from Iowa, Illinois, Minnesota, Ohio and Wisconsin. Respondents indicated that they manage approximately 142,000 acres of agricultural land across those seven states producing field crops (52%), vegetables (21%), tree fruit (13%), small fruit (12%) and ornamentals (2%).

Wildlife damage differs farm-to-farm based upon available habitat, crops produced, wildlife species present and any damage control measures in place. Resources available to farmers for wildlife damage mitigation vary according to federal and state policies, wildlife management agency culture, land tenure, access to experts, socioeconomic status, etc. Eighty-one percent of our survey respondents rated the issue of wildlife damage management as "important" or "critically important" to their farm operations, while only 20% rated currently available wildlife damage mitigation resources as "moderately adequate" or "extremely adequate".

Respondents were asked to list the three most damaging wildlife species present on their farm. Ungulates, including white-tailed deer and elk, were rated as the most damaging species by 47% of farmers. Deer were reported to damage many different crops, including both commodity field crops and specialty crops. Birds were rated as the second most damaging species, with 26% of respondents listing them as a priority. This included 12% of responses noting songbirds causing damage, 7% highlighting migratory birds like cranes and geese, and 7% mentioning turkeys. Songbird damage occurred mostly in small fruit and tree fruit, whereas migratory birds and turkeys reportedly caused damage to field crops. Additional responses focused on damage caused by raccoons and skunks (14%), rodents (8%), predators like coyotes, bear and cougars (1%) and feral hogs (<1%).

Food safety is an increasing concern for farms experiencing wildlife damage, particularly since the implementation of new federal food safety policies like GAP and FSMA. Fourteen percent of our survey respondents indicated that they are required to have a wildlife exclusion plan to comply with modern food safety standards, while an additional 18% were unsure whether they were required to exclude wildlife or not. Those required to exclude wildlife were commonly producing high-value specialty crops for human consumption, such as vegetables or fruit.

These survey results provide valuable insight into the needs and priorities of Midwest farmers regarding wildlife damage and resources available for mitigation. This information can be used to guide future research and outreach by prioritizing the most damaging wildlife species and/or vulnerable crops. Additional research is needed to identify what damage mitigation strategies farmers are currently using in the Midwest, and which are most effective in particular situations.

Chute-side Cattle Processing Demonstration

Michigan State University and Copper Country Farm Bureau will be teaming efforts to sponsor a twilight meeting June 15, at 6:00pm EDT. Caleb Accaccia will be hosting the event at 15249 Hamar Rd. Baraga, MI 49908. Frank Wardynski will be present to assist in demonstrating proper injection techniques for intramuscular, subcutaneous, and intravenous injection. Other procedures to be demonstrated include pulling blood from the tail, using an esophageal tube feeder on calves, ear tag application, ear tattooing, and collecting ear notches, dehorning, castration, pain mitigation.

The program is free, but participants are asked to call 906-884-4386 to rsvp for an accurate estimate of attendees.

Please Note: guidelines for Covid as issued by Dept of Health and Human Services will be followed.

What would you like from a field day?

MSU Upper Peninsula Research and Extension Center took a year off from our field day in 2020, but we will be open to the public again soon, and would like to host educational activities for farmers this summer.

We are looking for your feedback to plan a relevant and useful field day. If you are interested in attending a field day, please respond with your preferences.

To take the survey: https://msu.co1.qualtrics.com/jfe/form/ SV_0NWDrzCMVJ43gx0



Top tick tips...



Use an EPA-registered repellant. Most of the ones approved for mosquitoes are approved for ticks. Just check the label to confirm. You also can use permethrin to

stun and/or kill ticks that crawl onto clothing, equipment and gear.

- Check for ticks after activity near or in tick habitat on you and your pets! Check your gear and shoes, too.
- To increase your chances of finding an attached tick and thereby reducing your risk of contracting Lyme disease, shower or bathe after activity near or in tick habitat. You also can put your clothes directly into the dryer for ten minutes on high heat to kill ticks.
- If you are bitten by a tick, don't panic. Carefully use tweezers to grab the tick as close to your skin as possible. Pull it out, snap a pic and submit it on The Tick App for researchers to identify.
- Preserve the tick, in case you get sick. Place the tick in a plastic bag, label the bag with the date and location of where you think you picked up the tick and store it in your freezer. If you begin to feel ill, you can take the tick to your doctor to help with diagnosis and treatment.

Classifieds

FOR SALE: Simmental Bulls, mature and young, registered and non-registered. Call Duane Kolpack (906) 362-6862.

FOR SALE: 2nd and 3rd crop alfalfa, small square bales. Marenger Potato Farm, Flat Rock. (906)384-6587.

FOR SALE: Alfalfa Balage, 2nd and 3rd crop alfalfa. \$60/bale. (906) 630-4945.

FOR SALE: Registered Dexter cattle, all ages and models. Call Tolfree Farms (906) 884-2351 or email countryj@jamadots.com.

FOR SALE: Hay, large square bales 3x3x7.75 Timothy grass, 4,000 to sell. Former dairy farm doing all big square bales hay. Call Dave Bell in the EUP 906-440-6455 or email Bellsdairy@yahoo.com. Also a realtor in the UP so contact me for real estate here. Dave@smith-company.com

Beautiful property in the Upper Michigan, 130 acres In Perkins for sale or pasture for rent for livestock for the 2021 season. Beautiful river running through it. Great for hunting, building or developing, or simple grazing livestock. Land is divided into 9 paddocks with high tensile electric fence and 5 stock watering ponds. Call (906) 359-4825.

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Average price/100 wt. for 1 ton lots

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