

# Farm & Ranch

SPRING





# Prepping for Spring

Farm operations mirror the seasons, coming back to life in spring.

To produce at their peak, however, farms need to be properly prepped. Here's a handy check list.

## INSPECT THE PROPERTY

Farm structures and equipment can be damaged by harsh weather conditions, in particular if they were not winterized or stored properly. Walk the property to inspect everything closely, noting any needed repairs before spring's hectic days. Pay close attention to animal housing, your fencing and, of course, various machines. If major repairs are unfortunately needed, early inspections mean that you can contact agriculture mechanics before they're all booked up for the season.

## BALANCE THE BOOKS

Farm equipment isn't the only thing that needs to be in good working condition as spring approaches. Complete tax returns, follow up on outstanding invoices and confirm supplier contracts. Every penny counts these days. Farm income has generally been on a downward trend line for nearly a decade. Initial USDA projects put 2022 crop revenues higher than 2020, but lower than 2021 — when prices were supercharged by production-and-demand issues. Higher production costs and



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lower direct payments from the government are also expected to partially offset many gains.

## GENERAL MAINTENANCE

Heavy-duty machines should be kept indoors during winter, or under a tarp. Still, early deterioration and rust can be a problem — so keep a close eye

out. Spring is the time to change the oil and filters. Inspect everything for any remaining crop residue, and lubricate any moving parts in smaller machines. Look for signs of corrosion on the batteries, adjust brakes and clutches as needed, look for cracks from freezing in the

cooling systems and check steering.

## SPRING CLEANING

Farms need the same kind of spring cleaning as our homes, even if it's a little smellier. Cooped up livestock will be ready to go to pasture as the weather warms, leaving behind

stalls in need of serious attention. Scrub the walls and disinfect the mats. Replace any broken or outdated stall dividers. Wash out water tanks, buckets and feed bins that were difficult to deal with in colder temps. Then de-clutter your barn and any outbuildings, so you're ready for the work ahead.



# 2022 Crop Projections

While the American recovery as a whole is on a red-hot upward trend, with economic growth not seen since 1984, farming is a different story.

Corn, wheat, soybeans and cotton — the country's most-planted crops — are all projected to decline as pandemic-suppressed production finally begins catching up with demand.

These lowered expectations don't take into account fixed costs, a huge part of every farm's bottom line, since they vary so much from operation to operation. U.S. farmers are expected to reduce the amount of planted corn, while expanding acreage for wheat and soybeans, according to a November 2021 report from the USDA.

They forecast some 92 million acres of planted corn, down from 93.3 in 2021. Meanwhile, soybean acreage is expected to rise from 87.2 to 87.5 million. Wheat planting are forecast to increase from 46.7 to 49 million acres in 2022.

Here's why: Global food prices are at a 10-year high, led by increases in cereals, according to the United Nations Food and Agriculture Organization — so wheat is more profitable. Meanwhile, corn requires more fertilizer than soybeans, and there has



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been a recent surge in fertilizer costs.

This news impacts both the local and U.S. economy, but also the rest of the world: America is the No. 1 global corn supplier, the second largest soybean exporter behind Brazil and among the leading exporters of wheat.

Prices are on a general

downward trend, as supply begins to meet post-quarantine demand: Corn is expected to fall by 64 cents from 2021, wheat by 20 cents a bushel, cotton by 10 cents a pound and soybeans by \$1.85 a bushel, according to the USDA.

Prices for beef cattle were expected to rise initially, then

to decline below levels seen in 2020. Turkey and hog prices should begin lower, and then eventually begin to slowly climb.

Despite a smaller amount of acreage, corn production was still projected at an historic 15.24 billion bushels; the record of 15.148 was set in 2017. Soybeans were also

expected to reach a record 4.465 billion bushels in 2022, the USDA said.

The fertilizer issue relates to soaring prices for natural gas, and could lower crop yields in 2022. Farmers might reduce their application rates, or switch to crops like soybeans that have lower production costs than corn.





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# Latest Equipment and Tech

Spring is a great time to think about replacing or upgrading your farm equipment and technology.

The industry as a whole has been a beneficiary of a boom in modern new ideas, from sensors and crop-strengthening concepts to cameras that help you inspect property and plantings without ever leaving your living room. Here's a look.

## EYES IN THE SKY

Drones are an easy and affordable way to keep a close eye on your operation, while utilizing all of the new advancements in data-focused farming. You can monitor the furthest reaches of your property for issues ranging from structure and fence

integrity to trespassing. But they're also incredibly useful for monitoring your growing performance, so that key adjustments can be made when planting. Consult with an area electronics pro, who can tell you more about what's right for your farm. Be sure to ask about infrared cameras, which can more easily highlight distressed plants than more conventional photography.

## SENSORS ON THE GROUND

The U.S. Department of Agriculture has developed a series of innovative irrigation sensors which can detect

changes and stress in plants. Working with their internal Agricultural Research Service, the department aimed to supercharge efficiency for farmers who can spend up to \$2,500 an acre on watering alone, once permanent piping, pumps and water costs are added up. The sensors are placed on pipelines for individual above-ground irrigation systems, and will automatically water crops only when it's needed.

## REPLACING EQUIPMENT

Maybe you don't need the latest high-tech gadget to run your family farm, or don't feel comfortable working side-by-side with self-driving tractors or robot row pickers. The arrival of spring still requires a focused

inventory on existing conventional equipment. Next, you'll have to decide whether to replace machines that play such key roles in your farm's everyday operation. New items normally arrive with a warranty and support program from its individual manufacturer. But if you're considering buying a used replacement, find a local professional to inspect the potential purchase and provide a valued second opinion. For some, leasing might make more sense. This payment option usually involves lower payments, which can free up ready cash for other spring-time needs. Those who lease can also return equipment at the end of the season, avoiding payments when the machines aren't going to be in use.

# Farm Equipment Safety

Agriculture is the most dangerous job in the country, according to the U.S. Bureau of Labor Statistics, with an average of 573 fatalities a year.

That equals some 23 deaths per 100,000 workers. Many of these accidents involve farm equipment, so here's how to keep yourself safe:

## DO YOUR HOMEWORK

The leading cause of death in farming, year in and year out, typically involves overturned equipment. But there are other risks, some of which are quite significant. A new tractor might have additional features, or in some cases might function very differently than your old one. Read and then comply with any provided manuals. Keep up with and follow all relevant state and federal laws. They are put in place to protect you and your workers, and failure to comply can put everyone at risk for fines, at best — and terrible injuries, at worst.

## ARRIVE PREPARED

Every day things like untied shoelaces, frayed pants legs, untucked shirts and even hair that hasn't been pulled back can lead to horrific mishaps when operating farm machinery. Be especially careful around the power take-off



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shaft, never reaching over it and always disengaging the PTO then turning off the engine before removing your seat. Ensure that you've had plenty of rest, since a fatigued operator is a dangerous operator. Maintain general awareness, and avoid alcohol. Keep children and pets away, since their natural curiosity could have life-changing conse-

quences. Always buckle up, even on equipment with roll-over protective measures. Seat belts keep drivers within the safety of the cab in case the machine tips; they also prevent workers from being thrown into the cab frame or out a door.

## MAKE ADJUSTMENTS

Keep all of your shields,

access doors and guards in place while operating farm equipment, and make any necessary alterations based on your own operating conditions. Ride alone when taking an ATV out to monitor livestock, irrigation systems and fence lines. It's already difficult to steer through rough farm terrain, even without the destabilizing presence of a passenger. If your

older tractor doesn't have roll-over protection, consider buying a kit. In some cases, they might be more expensive than your classic equipment originally cost — but this safety feature is worth it if the unthinkable happens. Affix an approved slow-moving vehicle emblem on any piece of farm equipment before traveling down a roadway.



# Getting Loans and Aid

The need for financial assistance is a reality for farmers, whether you are just starting out or trying to weather the difficulties of a bad season or an economic downturn.

The Farm Service Agency, a part of the U.S. Department of Agriculture, ensures access to loans on reasonable terms so that farms and ranches can be maintained. There are also specially formulated pandemic-related relief plans. Here's how to get help:

## REQUESTING A LOAN

Farming is expensive, with tight margins and plenty of variables. When timelines or prices are disrupted by weather or other unforeseen issues, a timely loan can help build a bridge to better days. These temporary packages help keep operations underway until things get back to normal. Your local ag department can provide a referral.

## TYPES OF FSA LOANS

There are several different options, depending on need. Operational loans are designed to help when every-day issues arise, like a piece of large equipment failing during the busy season. They're directed at every-day expenses meant to keep the operation going.



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Other eligible items can include things like seeds and fertilizer. Microloans are tailored to the specific size of each farm or ranch. Ownership loans, on the other hand, are larger programs meant to help open doors for those entering into farming.

## FSA QUALIFYING TERMS

The Farm Service Agency requires that your business operates as a family farm, as determined by how many fam-

ily members are part of the management and labor teams. Outside workers are allowed, including paid consultants, but the primary decision maker for the operation must be a part of your family. Applicants have to be American citizens with a good credit history, and must not be delinquent on any form of federal debt.

## OTHER FORMS OF ASSISTANCE

The pandemic has wreaked

havoc on multiple elements of the food supply chain, even shutting down USDA programs meant to support American farmers and ranchers. But assistance is coming back online. Some of these programs are general in nature, like the Coronavirus Food Assistance Program, but most are directed at specific areas of the industry — including the Pandemic Livestock Indemnity Program. Ongoing aid is being provided

by programs like the USDA's Pandemic Market Volatility Assistance Program, which will assist dairy farmers who experienced losses due to pandemic-related market fluctuations. Other forms of assistance are meant to spur new ideas: The Specialty Crop Block Grant Program, for instance, funds innovative projects that open up new market opportunities for American food and ag products.



# Beating the Heat

This industry is physically demanding, and can be life-threatening because of the use of heavy machinery. That's not the only danger farmers face, however.

Days spent under the blistering sun, in particularly without adequate shade and water breaks, can lead to heat-related conditions like dizziness, nausea, dehydration and heat stroke. Particularly severe cases can even end in death. Here's how to protect yourself and your workers as temps rise.

## A GROWING PROBLEM

In years past, farm workers said their biggest worry was the cumulative harm that pesticides built up over time, but heat stress is now a more immediate danger in the fields. In fact, heat stroke is a leading cause of death among farmers, and their rates of heat illnesses are 20 times greater than that of the average civilian worker in the United States, according to the Centers for Disease Control and Prevention. But only two states — California and Washington — have a required break schedule. That means we all play a part in keeping farms and their workers safe. Want to learn more? The Association of Farmworker Opportunity Programs offers a



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treasure trove of helpful information, while also hosting the National Heat Stress Prevention Training Marathon Week annually as a part of OSHA's Water/Rest/Shade campaign.

## HOW TO COOL OFF

Create a comfortable rest area in the shade, nearby so that it's easily accessible. Provide plenty of cold water

to avoid dehydration-related heat disorders. Drink on a set cycle of 15 to 20 minutes, since thirst isn't always a solid indicator when it comes to dehydration.

Try to schedule the most stressful, least sheltered activities during the cooler hours. Remember that some workers have additional burdens, including suffocating personal-protective equipment worn

by pesticide applicators, and the heavy boots and trousers needed to work with thorny plants.

## OTHER RISKS

With heat comes a heightened risk of skin cancer. The American Academy of Dermatology Farmers confirms that farmers absorb far more ultraviolet radiation than the general public, since

they spend many more hours outside between May and October than the average American. Sunlight also reflects off water, machinery and dirt between the rows of plants. So, wear protective clothing and a hat, reapply a sweat-resistant sunscreen often, and try to work in shadier areas between 10 a.m. and 2 p.m. when sunshine is at its peak.



# Expanding Your Farm

Expanding your farm might mean adding acreage or trying a new crop.

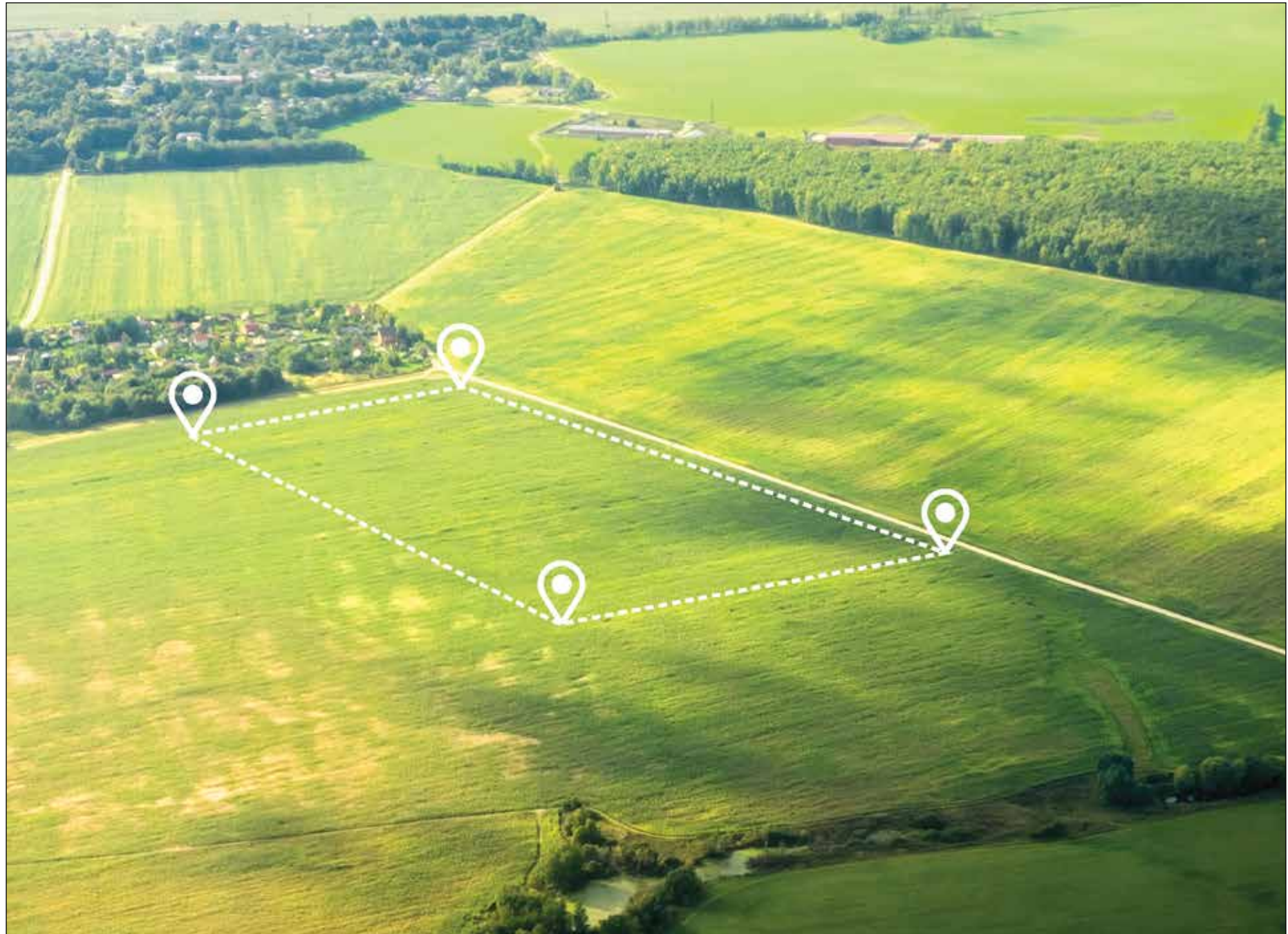
Either way, spring can provide a platform for big dreams. Investing in more land is a huge decision, but even relatively easier ones involving different plantings has to be part of a well thought-out process. Here are some tips on growing your operation.

## HOW TO BUY

Your entire farm could be put at risk by purchasing at the wrong time, or choosing a bad plot. Unfortunately, that risk is an every-day element of this business. Other parts of the land-buying process, however, are more cut and dried. Governmental programs like the FSA Direct Farm Ownership Loan offer special benefits for farmers, including up to 100% financing for expanding family farms and increasing agricultural productivity. Keep in mind that buying isn't the only choice if you want to expand — and it might not even be the right choice. Talk to a real-estate professional about the cost and benefits of leasing.

## THE RIGHT SPOT

Once you've secured funding, farmers must analyze potential farmland on a variety of different levels including the local climate, availability of water and soil condi-



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tions. Different crops require different amounts of land in order to be profitable. In some cases, the type of land may require additional equipment, so taking a pre-purchase inventory is essential. Consider hiring a qualified agent who specializes in agricultural deals since that could give you a business advantage. They can also navigate

through potential problems with land boundaries. Pay closest attention to its earlier use, since neglected land may not have the needed nutrients for crops and an area formerly used for industrial products might harbor toxic chemicals.

## REPURPOSING YOUR LAND

Your unused property, or

land that could be cleared for planting, might provide an expansion opportunity without having to go through the hassle and expense of a purchase. Your next cash crop might be waiting to be planted on land you already own. Even smaller projects like a honey operation can turn a neglected corner of your property into a new revenue

stream. Raising bees requires in-depth research, but a well-run process can lead to a significant influx of cash.

Other smaller start-up ideas include native vegetable or fruit gardens, or a pumpkin patch. They'd all serve as prime candidates for local tours and school field trips, which can help raise your farm's profile.