

# Farm & Ranch FALL





# Offseason Purchasing

Farms simply can't succeed without safe and fully operational equipment.

Unfortunately, over time, these machines can become run down or simply outdated. The forces of everyday wear and tear and the weather take their toll. Take some time this offseason to consider whether it's time to replace or upgrade your equipment.

## BEFORE YOU BUY

Ask the appropriate questions before shopping. Consider your own personal financial constraints and long-term plans first. Equipment is available to suit every size budget and operation. Determine how much horsepower you actually need, the necessary accessories and technology, and various specifics like weight, wheel spacing and hydraulic capacity. Most importantly, establish a budget for yourself – and commit to sticking to that budget.

## NEW OR USED?

The initial decision you'll need to make before buying farm equipment is whether to opt for new or used. New options will naturally be pricier but they come with a warranty, the latest technology, and helpful manufacturer support. On the other hand, used equipment is cheaper but may have its own functionality



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issues in the future. You will pay less upfront but then have to prepare for factors like longevity and quality.

All of this must be determined on a case-by-case basis, and what suits your farm or ranch may not be the best fit for someone else. Before purchasing any used equipment, thoroughly inspect and test

drive the machinery. Seek out the assistance of a local professional if you're unsure what to look for.

## IF YOU LEASE

Leasing may make sense in certain situations. These short-term agreements enable farmers and ranchers to use essential machinery during

the busy season without having to pay a monthly note during traditionally slow months. This additional income could be used to invest in other areas of the property, to save for an upgrade on other equipment – or to pay off existing debt.

On the other hand, buying might be the better choice if

the machinery will be in more frequent use. There are depreciation concerns, but also tax deductions available on the equipment. Make sure that any machinery you purchase meets safety standards and regulations. Also ensure that everyone is properly trained on how to safely operate and maintain the equipment.



# Protecting Livestock

Challenging winter conditions can have a huge effect on animals, whether you live out West, in the Northern Plains or in the Deep South.

Here's how to prepare for the changing seasons.

## HELP THEM ADAPT

The most effective method for preparing livestock for winter is through acclimation. Keep them outside as summer transitions to winter so that their coats can adapt to the changing conditions. As temperatures decrease, they will grow thicker hair that will offer necessary insulation for the upcoming seasons.

## PROVIDE SHELTER

Provide livestock with protection from the elements. Temperatures below 18 degrees become unmanageable for cattle, even with their heavy coats. At that point, extension service agents caution that the animals can develop a dangerous nutritional imbalance by expending too much energy simply trying to stay warm. Wind, moisture and freezing conditions can then lead to death without barriers and windbreaks. Frostbite is also a concern, so provide dry bedding. Calves are at an



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increased risk of frostbite, hypothermia and death.

## INCREASED FEEDING

Experts caution that cattle feedings should increase by 20 percent during cold-weather months. This process should begin before temperatures start to drop, by providing the required additional percentage of feed or additional hay.

In some cases, changing the amount or frequency of livestock feedings aren't the only options. You may be able to switch to different feeds with higher nutrient levels to help cattle with their new dietary needs. When storms approach, remember to place their feed behind the windbreak; that will encourage cattle to remain there.

## OTHER HAZARDS

Monitor water levels daily. Livestock risk dangerous weight loss because they won't eat as much if they don't get the proper amount of liquids. Some may try to eat snow if water is unavailable for long enough, but they can't consume enough to meet their water needs. Watch for ice accumulation, since cattle may

be hesitant to drink from frozen-over water sources.

Remember that creek bottoms, swales and other similar land features shouldn't be thought of as windbreaks. They are a favorable environment in the winter for flooding or drifting snow when high winds are present. Cattle can potentially become trapped, creating a life-threatening situation.



# Time to Winterize

Just because the busy harvest season is over doesn't mean there's nothing to do — quite the opposite.

Maintaining your farm or ranch and its faithful equipment is essential as the seasons change. Here are a few winterizing tips.

## **ANALYZE USED OIL**

Your equipment works overtime to keep up with the demands of a farm or ranch's busiest season. Consider getting a used oil analysis to determine the extent of wear and tear. Technicians will be able to detect trace elements in the oil sample that point to a number of issues. Getting all these things fixed before putting away your equipment will ensure that you have a smoother spring.

## **MAINTAINING THE BATTERY**

Much of your everyday machinery will be sitting idle over the winter, so it's important to disconnect any batteries that you can to avoid leaks. Elsewhere, check and replace any coolant that isn't designed to work at lower temperatures. Top off your fuel and oil tanks to guard against the build-up of condensation.

## **GREASE MOVING PARTS**

Once those potential issues have been addressed, move on to greasing up any of the



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machine's moving parts. These elements can corrode over the winter when they'll remain still. A fresh dollop of grease will ensure everything gets quickly moving again when it's time to plant.

## **CHANGE YOUR FUEL**

Farmers and ranchers who

use No. 2 diesel for warmer months should switch to a more winter-friendly version for any equipment that's still in use. No. 2 offers more energy per gallon, but the No. 1 version of this fuel boasts a lower cloud point, so it gels at lower temperatures than No. 2 diesel. Winterize any systems

that could be exposed to freezing temperatures to prevent damage to pumps.

## **CLEANING UP**

Clean equipment to remove dirt and plant debris before temperatures fall too low. This material holds moisture and can lead to rust that eats away

at metal parts. Washed equipment also repels pests. Look for wear points, loose fasteners, broken welds, alignment issues and lubrication problems.

Properly store any tools that won't be used during the winter to prevent damage or deterioration.

# After a Bad Season

If you've had a tough year, remember that financial assistance is available for farmers in need of support.

Whether you're facing challenges at the beginning of the journey or dealing with a seasonal setback, help is out there. Here's a look at some of the available resources:

## HELP FOR FARMERS

Farming naturally involves its own set of obstacles, from unpredictable weather to equipment malfunctions. In some cases, a well-timed loan can make all the difference. The types of loans available depend on individual circumstances and have different requirements.

There are other grants and support programs designed specifically to aid farms and ranches. Talk to local ag center representatives to find out more about available local options and receive expert referrals.

## LOAN OPTIONS

Operational micro-loans are designed to address day-to-day challenges. That could mean an equipment breakdown during harvest season, or specific needs like additional seeds or fertilizers. These loans are customized to suit these specific needs as well as the scale of the farm or ranch. On the other hand, larger ownership loans are intended for



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new farmers looking to establish their operations.

The Farm Service Agency of the U.S. Department of Agriculture offers loans with favorable terms to help farmers and ranchers stay afloat. These loans may serve as temporary solutions to keep the farm running smoothly or as long-term investments. They have specific eligibility criteria. For instance, applicants must own

a family farm with a set number of family members involved in labor and management. Applicants must be U.S. citizens, possess good credit and have no outstanding debts to the federal government.

## ASSISTANCE PROGRAMS

In times of crisis, such as economic downturns or natural disasters, the USDA offers disaster assistance programs to

help farmers recover and rebuild. These programs provide financial assistance for crop and livestock losses, as well as support for repairing and replacing damaged equipment and farm infrastructure.

Other ongoing assistance programs available to farmers include the Rural Cooperative Development Grant Program, Beginning Farmer and Rancher Development Program, Value

Added Producer Grants, and the Socially Disadvantaged Group Program. These initiatives offer financial support, training and technical assistance to help farmers improve their operations, increase profitability and expand markets. In some cases, they provide resources for farmers who are just starting out and need guidance on how to navigate the agricultural industry.



# Saving Summer's Bounty

If all goes to plan, each season produces an abundance of food. Now is the time to get it all stored away for the coming winter months.

By canning your produce, you can enjoy your freshly picked crops in the coming weeks — or preserve them for consumption throughout the year. The key is to eliminate oxygen from the jars or cans to prevent the growth of bacteria, molds and yeasts. If properly put away, you can enjoy huge savings compared with store-bought canned food.

## BEST OPTIONS

Different canning methods are recommended, depending on the food's acid content. Generally, however, the best fruits for canning include apples, blueberries, blackberries, cherries, peaches, cranberries, pears, raspberries, plums and strawberries. You'll have the most success with these vegetables: beans, asparagus, cabbage, cucumbers, carrots, mushrooms, tomatoes, radishes, zucchini and winter squash.

## GETTING STARTED

To get started, you'll need a deep pot with a lid and rack to act as a boiling water bath and a pressure canner. Collect a set of glass jars with lids and



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bands. Discard any that have cracks or uneven edges, since they might not properly seal. Buy some tongs to lift jars and a funnel, while having a spatula, ladle and knife on hand.

Before starting the canning process, wash and peel your freshly picked produce. Most fruits and vegetables should be hot packed, and some may

require an acidic additive such as lemon juice. Foods with higher acidity levels, like berries and cucumbers, can be canned using a water bath or pressure canner.

## STORING IT AWAY

When storing your canned goods, make sure the space is cool, dry and dark. Exposure

to direct sunlight or temperatures exceeding 95 degrees can negatively affect the quality of your preserved food. Remember to label each jar with the date it was canned and what's inside to keep track of freshness and contents. Rotate your canned goods so that you use the oldest ones first.

## YEAR-ROUND ACTIVITY

For optimal results, can everything as soon as possible — preferably on the same day that it is harvested. Young, tender produce does the best when canned since it still retains the most flavor. So, consider canning multiple times throughout the growing season to maximize your harvest.

# Focus on Conservation

Farms and ranches of all sizes can take advantage of conservation opportunities.

One of the easiest — and most helpful — initiatives involves saving water. Experts say about 70 percent of the freshwater we use is due to agricultural processes. That's why it's so important to focus on water usage, even if your property isn't located in an area facing shortages or drought.

## HOW TECHNOLOGY HELPS

General awareness of water usage has grown by leaps and bounds as we see how shortages are affecting local communities. Thankfully, conservation is easier than ever because of modern technical advances. New tools, methodologies and equipment have led to integrated plans in everyday farming activities, creating greater protection for this precious natural resource.

## SCHEDULING PATTERNS

Farmers are now taking advantage of smart irrigation scheduling patterns that reduce water usage and improve crop yields. Software programs analyze local weather data, such as temperatures, rainfall and humidity, allowing farmers to easily determine optimal times for irrigation.



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Agricultural center extension agents, farm equipment experts and university programs can provide recommendations and valuable guidance for anyone who's not as tech-savvy.

## KNOWING THE LAND

Become familiar with the unique opportunities and challenges of your own farm or ranch. For instance, soil health plays a crucial role in

water conservation. By improving organic matter content and soil structure, you'll increase water-holding capacity and reduce the amount needed for irrigation. Experts recommend techniques like cover cropping, reduced tillage, crop rotation and the use of organic amendments.

Precision agriculture techniques like variable-rate fertilization and irrigation can help optimize water use while

minimizing waste. If you live in an area with lots of rainfall, consider installing catchment systems to make a huge impact. Farmers can recycle tens of thousands of gallons of water each season at no extra cost after the initial purchase price. Be aware, too, that some species of trees like willows, Russian olive, cottonwood and tamarisk will consume excessive amounts of water that might otherwise

be used for crops.

## WHY IT MATTERS

These conservation practices preserve water resources while reducing costs and improving the overall sustainability of farm operations. Visit your local extension offices or talk to a knowledgeable salesperson to find out more about implementing any new approaches on your property.



# Small-Scale Farming

Interested in farming or diversifying your operation but have limited capital or space? Consider a smaller-scale project like raising small animals or cultivating fruits and vegetables to create a new income source.

What starts as a part-time endeavor might potentially lead to more lucrative opportunities.

You could start with something as small as farming new produce inside your own home with a hydroponic system, where plants are grown in water or an artificial substrate. If there's more room on your property or farm, widen your scope with chickens, flowers or bees.

## GROWING FLOWERS

A well-prepared flower bed or greenhouse can provide fertile ground for pretty blooms – and some extra cash. Talk to local nursery experts to find out which flowers thrive in your particular climate – and which ones are most in demand in the area. Once you've begun producing, set up a space to sell on your property, at the local farmer's market or at a roadside spot. Use your early profits to buy more bulbs while expanding



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your customer base with new selections of flowers.

## KEEPING CHICKENS

Smaller animals like chickens can be a great new income option, whether you already raise livestock or not. You won't need much more space than their coop occupies in your pasture or small plot of land. Start by

purchasing a few chicks or if they're not available, consider incubating chickens from eggs. If you're interested in getting to market as quickly as possible, broiler chickens typically mature in as little as six to nine weeks, whereas egg-laying hens aren't ready to sell for around nine months. Just be sure to create a sturdy enclosure since small birds

are at risk from coyotes and cats.

## BEEKEEPING

Beekeeping can also be a rewarding and profitable part-time endeavor. The demand for bee products and local honey has never been higher, particularly as news outlets continue to report a decline in bee populations. You can launch these

operations with just a few hives and then expand as you go. Beekeeping requires minimal space and can often be done in both rural and urban areas. With the right training and equipment, you'll soon be harvesting beeswax, honey and other bee products. Beekeeping also helps support the local ecosystem by producing pollinators for plants in your area.