

Fall Farm & Ranch



Putting Safety First

Agriculture is one of the most hazardous U.S. industries.

Hundreds of farmers and ranch workers die annually from work-related injuries. Their work takes place outdoors in difficult conditions and often happens around hulking, dangerous machinery. Still, we should all strive for a safer operation where the rewards outweigh the risks. Here's how.

TRACTOR AWARENESS

There are many risks associated with this industry, but the National Institute for Occupational Safety and Health points to one critical area of concern: Tractor overturns have remained the leading cause of farm injuries. Owners and operators should take this continued risk to heart when purchasing equipment, training staff and discussing work habits. Avoid loose-fitting clothing while operating farm equipment, since baggy pants legs, sleeves and shirt tails might get caught in machinery. Always turn off the tractor before removing the seat.

Another main focus should be on safely operating around the power take-off shaft, one of the most important — but hazardous — agricultural components. The power take-off shaft was developed in the 1930s as a means of transferring tractor power to various implements. The National Farmers Union reminds workers to avoid reaching over a PTO while it's



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in operation. Many come equipped with shields, but entanglement is still possible. Disengage the PTO before leaving the tractor.

ATV ISSUES

Small all-terrain vehicles have become the go-to vehicle for many farmers because of their agility, maneuverability

and cost-effectiveness. They're particularly useful when monitoring livestock, checking fence lines or inspecting irrigation systems, among other regular farm tasks. Rough terrain presents a danger, however, so ride alone when possible, and pay close attention to speed. Too much weight can make steering more difficult, even in

the best conditions.

CRITICAL MEASURES

Protect drivers by installing roll-over protection kits on older tractors, or upgrade to safer new models. The kits can be expensive, but they're a critically important safety measure that could save a life should an accident occur. Purchase and

install reflectors, lights and flags if you're going to be operating an ATV around larger vehicles, to increase visibility. Every farm is unique. So, talk to local agricultural extension offices, your insurance agent or supply store representatives about additional safety tips that are specific to your climate and terrain.

Saving Water

Conservation opportunities abound for farm operations of any size.

Farms and ranches need a lot of water to operate. In fact, the U.S. Geological Survey reports that about 70% of all freshwater withdrawals are for agricultural purposes. That makes conservation a critically important focus, even when your area isn't experiencing drought or other shortages.

NEW TECHNOLOGY

As with so many things in our modern world, new technology has had a huge impact on water conservation efforts. A growing awareness of usage and the underlying reasons for periods of scarcity has also led farmers to a renewed emphasis on saving water. New methodologies, tools and equipment are leading the way, as timely innovations make it easier to approach everyday farming operations with an integrated conservation plan. In this way, it's never been easier to preserve one of our most valuable natural resources.

BETTER IRRIGATION

Farmers have increasingly turned to smart scheduling patterns which can have dramatic impacts on usage while often improving yields. Software programs gather weather data, including local rainfall, temperatures and humidity, then provide targeted times when irrigation is



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optimal. For the less tech-savvy, local agricultural extension agents, university farming programs, and equipment centers can also provide helpful tips.

In some cases, they may have specific recommendations on what to plant, as well. Some native trees, including willows, cottonwood, Russian olive and tamarisk, consume excessive amounts of water — thereby reducing the availability

of water to nearby crops. Take them into consideration when developing your irrigation plan, or consider removing them, if appropriate.

CATCHING RAINWATER

New catchment systems can make a huge difference. Harness the power of rainwater by installing a collection apparatus. Larger systems allow farmers to recycle tens of

thousands of gallons of water per season, with no additional cost after the catchment is purchased. Local extension offices and trained sales personnel can tell you more about how these systems work, and which style and size is best for you.

LEVELING UP

Laser leveling is another newer technology that can reduce water usage when inte-

grated into your farm work. In some cases, water usage was down by as much as 30 percent — while crops increased another 20%. The secret is a laser-driven program that pinpoints problem areas while illustrating ideal land shapes. It's customizable based on differing terrain, climates and irrigation approaches. Runoff is reduced, while water is distributed more uniformly.

Loans and Aid

Help is out there for farmers who need financial assistance.

Unfortunately, farmers and ranchers sometimes need a hand, whether they are just starting out or have experienced common setbacks like an economic downturn or a bad season. If you find yourself in a tough spot, here's who to go to for help.

LOAN REQUESTS

Farming is defined by its challenges. There are tight margins, weather disruptions, pests, equipment issues and a host of other potentially unforeseen variables. Sometimes, a timely loan can help bridge the gap. The U.S. Department of Agriculture's Farm Service Agency offers loans with reasonable terms so farmers and ranchers can maintain their operations. Some temporary measures are specifically designed to help keep a farm up and running until things turn around, while others are aimed at longer-term goals. Talk to local agricultural center representatives about local options and referrals.

TYPES OF LOANS

Options vary, depending on circumstances and need. Operational micro-loans are meant to address everyday issues that may arise, like large-equipment failures during the harvest season. Other eligible needs may



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include additional fertilizer or seeds. They are tailored around the specific need and size of the ranch or farm. On the other hand, ownership loans are meant to help those who are just beginning their farming operation.

KNOW THE TERMS

There are qualifying terms for Farm Service Agency loans. Requirements include owning

a family farm, with a strict number of related workers making up management and labor. The primary decision makers for the farm must be a member of the family, though outside workers and even paid consultants are allowed. Applicants must be citizens of the United States, have good credit, and may not be delinquent on any kind of debt to the federal government.

ADDITIONAL ASSISTANCE

Ongoing aid programs include the Rural Cooperative Development Grant Program, the Value Added Producer Grants, the Beginning Farmer and Rancher Development Program, the Socially Disadvantaged Groups Grant Program, and the Farmers Market and Local Food Promotion Program, among many others. There are also

local and state aid programs. The Specialty Crop Block Grant Program funds projects with innovative ideas for food and agricultural products. New aid programs to help farmers and ranchers also emerged during the pandemic, including the Coronavirus Food Assistance Program, the Pandemic Livestock Indemnity Program, and the Pandemic Market Volatility Assistance Program.

Time to Buy New Gear?

Faithful farm machines eventually become run down or simply outdated.

Farms don't succeed without fully operational, safe and dependent equipment. Still, it's an uphill climb against the forces of age, weather and everyday wear and tear. Here's what to consider before you splurge on these often-expensive new machines.

BEFORE YOU BUY

It's important to ask the right questions before you begin shopping. Consider your financial constraints and long-range plans first: Different equipment is available to suit every size operation. Decide on how much horsepower you need, the necessary technology and accessories, and specifics like wheel spacing, weight and hydraulic capacity. Most of all, develop a strict budget for yourself.

NEW VS. USED

The first of many decisions you'll have to make before purchasing new farm equipment is whether to take advantage of new or used options. New equipment will be more expensive but also comes with the latest technology, a warranty and related manufacturer support. Used equipment might have its own functionality issues down the road, but you will pay less upfront. Factors like longevity,



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cost and quality are made on a case-by-case basis, and what works for you might not work for someone else. Before buying any used equipment, carefully inspect the machinery before you buy — or bring in a local professional, if you're unsure what to look for.

BUY VS. LEASE

In some instances, it might

make more sense to lease equipment. These short-term contracts allow farmers and ranchers to use key machinery during the busy season without having to pay for it during traditionally dormant months. This extra income could be used to save for an upgrade on other equipment, or to pay down existing debt. You also don't have to worry

about upkeep. The downside of leasing is that tax breaks afforded with purchases aren't in place when leasing.

Buying makes sense if machinery will be in more regular use. There are available tax deductions on the equipment, as well as depreciation considerations. Insurance, repair, fuel and labor costs may also be tax

deductible, but only if you purchase. Payments on any financing that's in place can also be reported as deductible expenses. Purchased equipment also becomes a valuable asset when you're ready to trade in for newer models. On the other hand, unlike leased equipment, maintenance, repair and other related costs are your responsibility.

The Best Farm Dogs

Hard-working canines are more than family pets on the farm.

Working dogs play a wide variety of roles beyond providing companionship, including herding, guarding and pest control, among others. Different dogs have specific strengths, however, so be sure to match the breed with your specific requirements.

BEFORE YOU DECIDE

Find a reputable breeder who follows proper protocols and discuss your plans. It's best to adopt canines when they are young so they can become familiarized at an early age with your family, staff, farm terrain, and specific obligations. Most farm dogs are protective by nature, so be prepared to carefully introduce new faces. Once you've determined your needs, it's time to match your farm with a new dog.

LONG HISTORY

Most people think of canines as family friends, but many domestic breeds were originally developed as working dogs. They played a huge role in farming prior to the 19th century Industrial Revolution, and they are still integral in many smaller operations. Today, most people think of farm dogs as medium to large breeds, but in earlier, more agrarian eras dogs of all sizes worked on farms.



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SPECIFIC NEEDS

Of the hundreds of registered breeds, the American Kennel Club names only around 30 as members of the herding group. Others — including Airedale Terriers, Anatolian Shepherds and Jack Russell Terriers — are best used for guarding or for pest control. No matter the breed or their natural inclinations,

all dogs must have consistent training to meet their fullest potential. Working breeds make good companions, but they are not lap dogs. They are hardy, intelligent and above all athletic. They live for the outdoors, whether herding, playing or guarding.

KEY CHARACTERISTICS

Ace herders include the bor-

der collie, Australian cattle dog, great Pyrenees and German shepherd. The Australian shepherd, another great herding dog, was actually developed in the U.S. — specifically the high plains of the West. As the name implies, border collies were bred on the border of England and Scotland. Like other herding dogs, Anatolian shepherds

make terrific guardians, but are not prone to unnecessary barking — a key personality trait for those seeking a calm presence. Pembroke Welsh corgis were a favorite companion of the late Queen Elizabeth II, but were developed in rural Wales to herd and guard farms. The German shepherd may be the most intelligent and versatile of them all.

Smart Land Purchases

Buying land is a big decision whether you're starting out or looking to expand.

Purchasing land involves a complicated process where farming needs must be balanced with price and debt considerations. Buying at an inopportune time or choosing a poor piece of land can have catastrophic consequences. At the same time, overextending yourself financially could doom your entire operation.

FUNDING THE PURCHASE

If you don't have enough money to purchase with cash, consider your income-to-debt ratio before extending an offer. There are banking and governmental outreach programs specifically designed to ease the way for farmers to expand their operations or for new farmers to get underway. For instance, the FSA Direct Farm Ownership loan offers up to 100% financing for those who wish to buy more family farmland, increase productivity or extend operations. There are also programs in place to ensure that farmland remains in the family for future generations. The U.S. Department of Agriculture's Farm Service Agency offers beginning farmer guaranteed loan programs as a path-way to land and capital. Microloans also provide assistance during the early years of a start-up.

FINDING THE LAND

Once the financial side is in



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order, it's time to search for suitable farmland. Begin by determining your long-term strategy. What will you plant or herd, and how much land is required? You'll need to analyze issues like irrigation, soil conditions, climate and location before making any purchase. Bring along experts if you don't feel comfortable

making those determinations yourself. A separate inventory of your farm equipment should also take place, in order to make sure you can continue to conduct operations without the need to purchase more. If you must buy additional larger machinery, there could be a significant impact on your budget.

WHEN YOU BUY

Order a property-boundary survey before signing anything, so an expert can confirm that the investment is legally theirs to sell. In some cases, neighbors may have been using land that didn't belong to them for long enough that the law might consider them owners.

Attorneys can help resolve ownership, but that will mean additional costs and time. As with any other property transaction, be prepared to negotiate to get the best value. If you're not a natural negotiator, hire an experienced real estate agent with lots of experience in agricultural deals to complete the sale.

Farming in Schools

Outreach programs help educate our youth on the industry's importance.

The average young person probably doesn't think much about how food actually makes it to the dinner table. That's where initiatives like the National Farm to School Network and the Future Farmers of America organization come in. These programs educate our youth on the importance of farming, while encouraging interest in becoming part of the industry.

FARM TO SCHOOL

The USDA sponsors the National Farm to School Network, aimed at increasing awareness of farming through food and agriculture education in classrooms and early-care centers. Communities are connected with local food producers through updated purchasing practices with a focus on local food in school cafeterias.

Sponsored educational activities related to agriculture, food and health also include farm visits, tastings, cooking demonstrations and the establishment of school gardens. Crucial community connections are made with local farmers, providing healthier, locally sourced food while imparting invaluable lessons about our food system.

The similar IDEA CNP Farm Program works on a smaller scale, linking a network of 12 educational farms in Texas



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and Louisiana.

FUTURE FARMERS

The Future Farmers of America organization was initially founded in 1928 to educate youths on agribusiness, production farming and forestry through leadership programs and intracurricular education. Their coursework and hands-on experiences have expanded more recently to

encourage real-world success in science, technology and business, so students can take part whether they intend to become farmers or work in other career fields. FFA members can also compete in career-development events focused on job skills, either individually or on a team.

WHAT YOU CAN DO

Farmers and those interest-

ed in farming who'd like to have a positive impact on our youth can offer to help teach agriculture classes, sponsor their own after-school farm-focused programs, or become a regular guest speaker.

Found a new farming club, where young people can establish a school or community garden. Grow season-specific food, then harvest it and share with friends, family and the

community.

Lead field trips back to your farm to explain more about the operation. Consider speaking to the school board about increasing their agricultural curriculum, as well as related conservation efforts like composting, tree planting and installing water catchments. Spearhead efforts to kick off a Farm to School program in your area, if there isn't one.