

Farmer/Rancher/ Agricultural Manager

Snapshot

Career Cluster(s): Agriculture, Food & Natural Resources; Business, Management & Administration

Interests: Agriculture; business practices; being outside; working independently

Earnings (Yearly Average): \$71,160

Employment & Outlook: Decline Expected

OVERVIEW

Sphere of Work

Farmers, ranchers, and other agricultural managers grow food for personal consumption and for wholesale and retail consumers. Farmers and farm managers oversee agricultural production and financial operations at farms, nurseries, ranches, and greenhouses. Farmers, ranchers, and other agricultural managers grow crops and tend to livestock, poultry, or aquatic animals. Although specific tasks vary by type of agricultural work, all farmers and farm managers are responsible for ensuring the care of crops and animals from conception to market. Farmers often perform the hands-on labor of planting, cultivating, operating farm machinery, harvesting crops and raising animals. They also engage in the business side of the operation and may have a personal stake in the opera-



Dairy farmers must ensure the proper care of milk cows. Photo via iStock.com/torwai. [Used under license.]

tion's finances, such as having inherited it as a family business, or having built it from the ground up. As such, the manager may be involved in the marketing and selling of crops and animals, as well as hiring, training, and supervising farm staff to complete daily tasks.

Work Environment

Farmers, ranchers, and other agricultural managers work in farms, nurseries, ranches, and greenhouses that they own or lease. Farmers and farm managers do not have set work hours and instead must work until tasks are complete. Crop farm work is seasonal. During nongrowing seasons, crop farmers and farm managers focus on repairing farm machinery, planning next year's crops, and marketing and selling efforts. They also interact with financial professionals who may be involved in the operation's backing, such as lenders or investment managers, and landholders if the land is leased. Animal farmers and farm managers work steadily throughout the year to care for their livestock, poultry, and aquatic animals.

Occupation Interest

Individuals attracted to the farming profession tend to be physically strong and detail-oriented people. Successful farmers and farm managers exhibit stamina, resilience, organizational abilities, integrity and ethics, independence, and effective time management. Business acumen and familiarity with computer technology is advantageous. Farmers and farm managers should enjoy physical labor and have a strong background in agriculture and business. Entrepreneurial farmers must have a desire to steadily grow their business and turn a profit—such farms may become legacies and be passed down to future generations.

A Day in the Life—Duties and Responsibilities

Farmers and farm managers perform different daily occupational duties and responsibilities depending on their specialization and work environment. They may specialize in the production of crops, beef, poultry, pork, dairy, or aquaculture.

On crop farms, farmers and farm managers oversee activities related to the planting, tending, and harvesting of crops. These tasks may include preparing soil and managing its nutrient levels, using natural or chemical methods to eliminate

Profile

Interests: Data, People, Things, Animals

Working Conditions: Both Inside and Outside

Physical Strength: Medium Work, Heavy Work

Education Needs: On-the-Job Training, High School Diploma with Technical Education, Junior/Technical/Community College, Apprenticeship, Bachelor's Degree

Licensure/Certification: Usually Not Required

Opportunities for Experience: Internship, Apprenticeship, Volunteer Work, Part-Time Work

Interest Score: ERC

Duties and Responsibilities

- Supervising all steps of crop production or ranging, including planting, fertilizing, harvesting, and herding
- Making decisions about crops or livestock by evaluating factors such as market conditions, disease, soil conditions, and the availability of federal programs
- Choosing and buying supplies, such as seed, fertilizer, and farm machinery
- Maintaining farming equipment
- Maintaining farm facilities, such as water pipes, fences, and animal shelters
- Serving as the sales agent for crops, livestock, and dairy products
- Recording financial, tax, production, and employee information

pests, irrigating and draining fields, weather forecasting, and storing fuels and chemicals. Crop farmers and farm managers promote and sell crops to distributors and food-processing companies, retail customers in farmers markets or farm stands, or shareholders in a Community Supported Agriculture (CSA) program.

Animal farmers and farm managers oversee meat production operations. They raise beef cattle, chickens, turkeys, ducks, game birds, goats, or pigs. Animal farmers and farm managers must ensure proper breeding and birthing and feeding, housing, transportation, and slaughtering. Those who work with beef cattle and pigs medicate and vaccinate the animals as needed.

On poultry farms, they also manage the hatchery, establish egg or meat-bird production effort, adjust the lighting in poultry buildings to promote molting or egg laying, and match stock size to seasonal demand. All animal farmers and farm managers are responsible for promoting and selling meat products.

Dairy farmers and farm managers direct tasks related to the production, collection, and sale of milk. They must ensure the proper care for milk cows. These farmers and farm managers oversee the establishment of a feed storage system for corn silage, alfalfa, hay, cottonseed, and soybeans. They also supervise the construction and maintenance of a milking parlor, a milking and milk storage system, and a manure management system. Dairy farmers and farm managers promote, transport, and sell dairy products.

Aquaculture farmers and farm managers oversee aquaculture production tasks. They or their staff stock ponds or floating nets with eggs, shellfish, or juvenile fish, feed fish stock, and protect fish stock from predators and contamination. Like their meat and dairy counterparts, these farmers and farm managers are responsible for the promotion and sale of their products.

In addition, all farmers and farm managers are responsible for purchasing supplies, maintaining farm machinery, ensuring the cleanliness of farm facilities, and educating themselves about government regulations and business trends affecting their industry. Recordkeeping abilities are paramount, to ensure smooth day-to-day business operations.

OCCUPATION SPECIALTIES

Farm General Manager

Farm General Managers operate farms for corporations, cooperatives, or other owners.

Fish Farmers

Fish Farmers spawn and raise fish for commercial purposes.

Fur Farmer

Fur Farmers feed and raise mink, fox, chinchilla, rabbits, and other fur-bearing animals for sale on the fur market.

Horse Trainer

Horse Trainers train horses for riding or harness.

Livestock Rancher

Livestock Ranchers breed and raise livestock such as beef cattle, dairy cattle, goats, horses, sheep, and swine to sell meat, dairy products, wool, and hair.

Nursery Manager

Nursery Managers supervise plant nurseries that produce plants for sale to wholesale or retail customers.

Organic Farmer/Farm Manager

Organic Farmers/Farm Managers grow crops, control pests, and maintain soil health without the use, or the limited use, of synthetic fertilizers and pesticides.

Poultry Farmer

Poultry Farmers raise chickens, turkeys, or other fowl for meat or egg production.

Shellfish Grower

Shellfish Growers cultivate and harvest beds of shellfish, such as clams and oysters.

Tree-Fruit-and-Nut Crop Farmers

Tree-Fruit-And-Nut Crop Farmers plant and cultivate fruit producing trees.

Vegetable Farmers

Vegetable Farmers plan and plant vegetables according to weather, type of soil, and size and location of the farm.

WORK ENVIRONMENT

Immediate Physical Environment

Farmers and farm managers work in farms, nurseries, ranches, and greenhouses. Farming tends to be very physical and requires extensive hard labor, walking, lifting, and bending. Farmers and farm managers are at high risk for back strain, pesticide exposure, and machine accidents.

Human Environment

Farms, nurseries, ranches, and greenhouses tend to be remotely located and isolated. However, farmers and farm managers interact with farm workers, families, customers, landholders, bankers, veterinarians, and government inspectors. The amount of human interaction often depends on the scale and business model of the farm operation. If the farm is not self-owned, farm managers typically report to a farmer or corporation.

Technological Environment

In the course of their work, farmers and farm managers use farm machinery and equipment such as animal feeders, hay balers, mowers, trucks, irrigation systems, tractors, chain saws, and milking machines. In addition, farmers and farm managers use computers, Internet communication tools, accounting and farm management software, and spreadsheets to assist them with the important business tasks of farming.

EDUCATION, TRAINING, AND ADVANCEMENT

High School/Secondary

High school-level study of mathematics, agricultural science, biology, chemistry, and business can provide a strong foundation for work as a farmer or college-level study in the field. High school students interested in this career path may benefit from internships, apprenticeships, or part-time work with local farms that expose them to the diversity and challenges of farming responsibilities. Work experience is required to reach the managerial level.

Suggested High School Subjects

- Algebra
- Biology
- Chemistry

- Civics
- Earth or Environmental Science
- Economics
- English
- Entrepreneurship
- Geometry
- History
- Physics
- Pre-Calculus
- Psychology
- Statistics
- Trigonometry

Related Career Pathways/Majors

Agriculture, Food & Natural Resources

Career Cluster

- Agribusiness Systems Pathway
- Animal Systems Pathway
- Natural Resources Systems Pathway
- Plant Systems Pathway
- Power, Structural & Technical Systems Pathway

Business, Management & Administration Career Cluster

- General Management Pathway

Postsecondary

Although a postsecondary degree is not strictly necessary for farm work, aspiring farmers or farm managers should pursue the associate degree or bachelor's degree in agriculture, farm management, agronomy, and dairy science. Formal postsecondary studies afford students a better understanding of the work and industry and provide greater opportunities for advancement. Postsecondary students can gain work experience and potential advantage in their future job searches by securing internships or part-time employment with local farms.

Related College Majors

- Agricultural Business & Management
- Agricultural Production Workers & Managers
- Agricultural Supplies Retailing & Wholesaling
- Farm & Ranch Management
- Horticulture Science

Transferable Skills and Abilities

Analytical Skills

- Monitoring and assessing the quality of land or livestock

Critical-thinking Skills

- Determining how to improve harvest and livestock while reacting to conditions that may affect short- or long-term plans

Initiative

- Being self-motivated in order to maximize crop or livestock production

Interpersonal Skills

- Supervising laborers and other workers

Mechanical Skills

- Operating complex machinery and occasionally performing routine maintenance

Physical Stamina

- Physically strenuous, repetitive tasks, such as bending, stooping, and lifting

Fast Fact

Agriculture has its own entrepreneurial name: agripreneurship. This refers to businesses that support and manage ag-focused businesses from manufacturing and production to marketing.

Source: 101entrepreneurship.org.



Sheep farming is one entrepreneurial path for animal lovers. Photo by fir002/Flagstaffotos, GFDL 1.2 <<http://www.gnu.org/licenses/old-licenses/fdl-1.2.html>>, via Wikimedia Commons.

- Horticulture Services Operations & Management
- International Agriculture
- Plant Sciences

Adult Job Seekers

Adults seeking employment as farmers or farm managers should have, at a minimum, a high school diploma or associate degree. Some farm manager jobs require experience, on-the-job training, and a bachelor's or master's degree. Those seeking farm manager positions should educate themselves about the educational and professional requirements of their prospective employers.

Adult job seekers may benefit from joining professional associations to help with networking and job searching. Professional farming and agricultural associations, such as the American Farm Bureau Federation (AFBF), the American Society of Agronomy (ASA), and the American Society of Farm Managers & Rural Appraisers (ASFMRA), generally offer job-finding workshops and maintain lists and forums of available jobs.

Becoming an entrepreneurial farm owner without previous experience can be extremely challenging. It is highly recommended to gain firsthand experience by working in the industry, while attaining the relevant education and contacts through networking.

Professional Certification and Licensure

Certification and licensure are not required for farmers but may be required of farm managers as a condition of employment, salary increase, or promotion. The Accredited Farm Manager (AFM) certification, offered by ASFMRA, is the leading option for voluntary farm manager certification. The AFM certification requires a minimum of 4 years of farm management experience, a 4-year college

degree or equivalent, a sample farm management plan, the successful completion of coursework, and an exam.

Additional Requirements

Successful farmers and farm managers will be knowledgeable about the profession's requirements, responsibilities, and opportunities. The US Environmental Protection Agency (EPA) requires farmers and farm workers to be trained in agricultural pesticide safe practices. Operating licenses for farm vehicles may be required for some types of agricultural work.

EARNINGS AND ADVANCEMENT

Earnings depend on the size of the farm, type of crops grown or animals raised, the weather during the growing season, market prices, cost of materials, labor costs, and management ability. Median annual earnings of farmers and farm managers were \$71,160 in 2019. The lowest 10 percent earned less than \$37,530, and the highest 10 percent earned more than \$132,760.

Farmers and farm managers may receive paid vacations, holidays, and sick days; life and health insurance; and retirement benefits. These are usually paid by an employer if the business is not self-owned. Farmers and farm managers may also receive free housing, transportation, and farm products.

EMPLOYMENT AND OUTLOOK

Farmers and farm managers held 952,300 jobs in 2019. Sixty-seven percent were self-employed. Employment is expected to decline 6 percent through the year 2029, due to the long-term trend toward the consolidation of farms into fewer and larger farms. Most job openings will result from the need to replace farmers who retire or leave the occupation for economic or other reasons.

Related Occupations

- Agricultural Engineer
- Agricultural/Food Science Technician
- Agricultural/Food Scientist
- Agricultural Worker
- Animal Care/Service Worker

- Construction Equipment Operator
- Grounds Maintenance Worker
- Purchasing Manager/Buyer/Purchasing Agent

MORE INFORMATION

Alternative Farming Systems Information Center (AFSIC)

National Agricultural Library
10301 Baltimore Avenue, Room 132
Beltsville, MD 20705
301.504.6559
www.nal.usda.gov/afsic

American Farm Bureau Federation (AFBF)

600 Maryland Avenue, SW, Suite 1000
Washington, DC 20024
202.406.3600
www.fb.org

American Society of Agronomy (ASA)

Career Development & Placement Services
5585 Guilford Road
Madison, WI 53711
608.273.8080
www.agronomy.org

American Society of Farm Managers & Rural Appraisers (ASFMRA)

720 South Colorado Boulevard, Suite 360-S
Glendale, CO 80246-2664
303.758.3513
info@asfmra.org
www.asfmra.org

National Agri-Marketing Association (NAMA)

11020 King Street, Suite 205
Overland Park, KS 66210
913.491.6500
agrimktg@nama.org
www.nama.org

National FFA Organization

P.O. Box 68960
6060 FFA Drive
Indianapolis, IN 46268-0960
317.802.6060
www.ffa.org

National Sustainable Agriculture Information Service

P.O. Box 3838
3040 Continental Drive
Butte, MT 59702
800.346.9140
askanag@ncat.org
attra.ncat.org

Water Environment Federation (WEF)

Public Education Manager-Career Information
601 Wythe Street
Alexandria, VA 22314
800.666.0206
csc@wef.org
www.wef.org

Simone Isadora Flynn; updated by Stuart Paterson



Conversation With...
COLLEEN HISTON

Co-owner/Operator
Shepherds Manor Creamery, LLC, New Windsor, MD
Sheep dairy farming, 12 years

What was your individual career path in terms of education/training, entry-level job, or other significant opportunity?

When our children were 7 and 8 years old, my husband Michael and I moved our family from the Washington, DC suburbs to a 2 1/2 acre farm in rural Maryland. The first thing we did was enroll them in the county 4-H. My daughter had a couple of market lambs, and the next year we bought a heifer, which my son preferred. They were very active for many years and were enriched by so many wonderful experiences. Then they went off to college, and we didn't have animals for awhile.

Michael and I have always had businesses along with our regular jobs, including a cleaning business early on, an embroidery business, and then a silk-screening business. I've done wine pairing dinners, and people urged me to become a chef. A few things came together to start us down the road to operating a sheep dairy.

We started missing the people we knew from 4-H fairs in the summer, so we bought a few breeding sheep, and my daughter showed me how to fit them, which is the process of getting them ready to show. Then we visited California a couple of times and got to know a cheese monger at a farmer's market. One percent of the sheep's cheese in the United States is produced here in this country. That spurred us to start doing research into sheep dairy farming. We joined the National Dairy Sheep Association and took cheesemaking classes, including a two-week course in Vermont. Finally, we bought 50 sheep.

After making do for a couple of years with the help of friends with acreage for our sheep, we bought this 22-acre farm. Over the years, I've learned to research grants and other funding sources. We had to build a building that cost \$500,000; and if you'd told me in the beginning we would do that, I wouldn't have believed you. You have to be very aggressive to create what we've created here.

Sheep dairying is seasonal. We started milking for three months a year and now are up to seven. Michael handles the shepherding and milking side of the operation; I focus on the cheesemaking, marketing, and production side, except during lambing, when I am in the barn alongside Michael.

You have to be able to wear several hats because you can't afford to automatically hire a cheesemaker or a shepherd. We slowly brought in workers to help with things like milking; I was able to quit my accounting job after four years. I sell the cheese I make at farmer's markets and to upscale restaurants in the Washington, DC-Baltimore area.

Michael has always had another job with flexible hours; he works for an engineering company diagnosing water and drainage problems. My former employer asked me to come back to temporarily fill in when an accountant left at the beginning of 2020. Soon COVID-19 hit, and with the uncertainty I've stayed on. We've done OK during the first year of the pandemic because farmers' markets increased.

What are the most important skills and/or qualities for someone in your profession?

Flexibility, tenacity, endurance, and patience. You must have passion and drive. You must be able to adapt on a dime. You have to really want to make it work. Money helps, but it's not the key.

What do you wish you had known going into this profession?

We basically put the cart before the horse because that's what we thought was right. We should have purchased our property, set up the dairy, then bought the sheep. Instead, we bought the sheep first because we already knew how to care for them, and we didn't think the breeds we wanted were readily available. They became available once we made the right contacts. So, we lambled for two seasons before purchasing this farm.

We've given up a lot to do this. We can't go anywhere because caring for the animals comes first. You have to be willing to go outside in 20 degrees or pouring rain before you eat so the sheep eat. You'll also get dirty as heck. If you're not willing to do that, don't even think about it.

Things go wrong: the cheese recipe doesn't turn out right or a customer gets angry. You have to be level-headed and handle those things. Go have your tantrum by yourself, then come back refreshed.

Are there many job opportunities in your profession? In what specific areas?

There are only about 100 sheep dairies in the United States. There are cheesemaking opportunities that are possible—not necessarily with sheep—using all milks, but you have to have extensive training. Milking opportunities will likely require relocation. Starting your own dairy from scratch is super-challenging and many fail. Those that survive are usually the few really big ones and the very small ones that are willing to keep their passion alive. We are an unusual size because we are on the small end of the mid-sized dairies.

How do you see your profession changing in the next 5 years? How will technology impact that change, and what skills will be required?

Sheep's milk cheese is becoming more popular and that's helping. Greek feta is made with sheep's milk, for instance. As a product, it's becoming more recognizable.

What do you enjoy most about your job, what do you enjoy least about your job?

I enjoy sharing knowledge about our product, having people taste my cheese and liking it, and the success associated with having a worthy product. I love to cook, but if I were a chef I'd be

working hard in the kitchen and rarely experience the satisfaction that comes from a happy customer. I get that because I go out to markets; I deal directly with all my customers. I enjoy the fact that I have variety including outside work, inside work, spending time with the sheep, making a great product with my hands, [and] the results when it turns out the way I want it to. It's great.

The difficulty is long hours, seven days a week. I miss social events. I sometimes miss life events. But I am willing to do that for now because the rewards outweigh the sacrifices.

Can you suggest a valuable “try this” for students considering a career in your profession?

Find work on a farm with animals to see if you're up for it. Taking care of animals in all types of weather and conditions is a commitment. Learn how to milk and take care of the sheep, spend time with somebody like me in the cheese room. Sometimes you can volunteer, and some internships pay.