

AGRICULTURE

GROWING OPPORTUNITIES



Produced by the Alabama Farmers Federation

Careers in agriculture:

**PLENTIFUL
WELL-COMPENSATED
REWARDING
DIVERSE**

NEEDED.

Agriculture students
make up less than

1%

of the total number
of students enrolled
in postsecondary
education.

2X

But did you know?

There are nearly two times as many diverse job
opportunities as there are qualified graduates to fill them!



91%

of agribusiness
companies said
that salaries have
increased in the last
12 months.



Farming.

Of all agricultural occupations, none is more challenging and rewarding than farming. It requires a diversity of skills and knowledge including agronomy, biology, chemistry, accounting, marketing, public relations, mechanics and technology.

Although successful, full-time farms often require substantial capital investment, there are paths to farm ownership for young entrepreneurs. In addition to multi-generational farm businesses, new producers often get their start through mentoring relationships with older farmers, contracts


with integrated agribusinesses or growing high-value crops that require less acreage and equipment but rely more heavily on labor.

Farmers today are increasingly college educated because successful businesses require a high level of business and marketing skills.

The demand for farmers has never been higher. Today, the average age of a farmer is 58. Meanwhile, farmers will need to double production by 2050 to feed the estimated 9 billion world population. This creates

opportunities for up and coming agriculturists. In addition, a growing interest in fresh, locally produced food is spurring the revitalization of small farming near urban centers.

While starting any new business requires planning, financing and commitment, there are abundant resources for beginning farmers, including grants and loans. For more information, contact a local U.S. Department of Agriculture service center or the Alabama Farmers Federation Young Farmers at alfayoungfarmers.org.



***The demand for farmers
has never been higher.***

FARMING AS A CAREER



Stan Usery

I chose farming because I grew up on a diversified poultry, row crop and cattle farm. I have a bachelor's degree in agronomy and soils and a master's degree in plant pathology, both from Auburn University. I am currently a contract grower for Tyson Foods and have nine 49- x 400-foot poultry houses. We also have 750 acres of row crops and grow winter wheat, soybeans and cotton. My advice to new farmers is to stay immersed in the news, technology and information pertaining to your industry. Being a farmer is not a 9 a.m. to 5 p.m. job. It takes work, dedication and effort.



Annie Dee

I was not raised on a farm, but I cultivated a passion for agriculture at an early age. I had a love for the land and wanted to make a difference in the world. I received a bachelor's degree in animal industries from Clemson University, and I continue to attend educational meetings related to agriculture every year. My 11 siblings and I own a cattle and row crop farm. We have more than 3,000 acres of row crops and 250,000 bushels of grain storage. A point of pride on our farm is the grain bin which has automatic temperature and moisture control, allowing us to store grain longer and sell it at a higher price. My biggest advice for beginning farmers is to find a mentor. Farmers love to help people and share what they know with anyone interested.



Garrett Henry

I chose farming because of the lifestyle it offers my family. I like being at home and spending time with my family while working. I also enjoy being my own boss. I grew up on a dairy farm, so I've always been around farming. I have a bachelor's degree in agricultural business and economics from Auburn University. I currently run a cow-calf operation. I also have a preconditioning facility, grow corn silage and operate a bull leasing business. We are a family operation managing about 300 cows. My biggest advice to new farmers is to look for and take opportunities. Get involved, meet new people and continue learning. Your operation is only as good as you make it, so put in the effort to make it successful.



Drew Wendland

I want to become a farmer because I was raised on a farm and have always enjoyed working alongside my dad. I also enjoy the work because there is always something new to do and learn. I am a senior at Auburn University studying agronomy and soils, something no one in my family has studied, so I bring fresh perspectives to the farm. I enjoy learning concepts at school I can apply on the farm the same day. Our family has a diversified farm and grows corn, wheat, oats, soybeans, sesame, cotton and pecans and raises cattle. We have been at our current location since 1919. My biggest advice to those interested in farming is work with a successful farmer and learn from them. There are risks involved in farming, so finding a mentor can benefit you during tough times.

EDUCATION

A majority of Alabama's agriscience teachers earned Bachelor of Science degrees in Agriscience Education from state institutions and received certificates to teach agriscience education in the state. However, there are alternate routes for individuals to become agriscience teachers today.

Alternative Certification

Individuals who hold a degree from an accredited university in any agriculture-related field and who had a GPA of at least 2.5 may be eligible to become an agriscience teacher. This process is called a Career and Technical Alternative Baccalaureate-Level Certificate (ABC).

Additional Teaching Field

Teachers certified in another area can seek an additional certification in agriscience education after two years of classroom experience by meeting certain criteria.

Salary: \$36,867-\$79,632 (plus very attractive retirement and health insurance benefits)



Mike Hutto

I have a bachelor's degree in agriscience education and a master's degree in instructional leadership. I have taught agriscience 14 years, originally in Georgia and then Alabama. As an agriscience teacher, I prepare lesson plans; plan field trips, Career Development Events, agricultural tours and state and national FFA conventions; and organize Supervised Agriculture Experience projects, along with teaching classes. I also serve as my school's FFA adviser. I believe flexibility and communication skills are incredibly important in education. School systems are agriscience graduates' most common employer, but there are also employment opportunities in the agriculture industry.

Jena Perry

I have bachelor's and master's degrees in agriscience education from Mississippi State University. I have a diversified career history working at stables, on the MSU dairy and as a lab technician for the USDA. I've taught for nine years and have learned teaching is a little bit of everything. I love that every day can be different with the variety of topics I cover, like animal science and welding. Important skills for teachers are people skills, organization, determination, ambition and initiative. Agriscience teachers bridge the gap between farmers and society. We all rely on agriculture for our daily needs, and it is my job to help students understand that.



Ag Teachers Are In High Demand

In 2015 in the Southeast...

- 63** new agricultural education positions were added
- 49.5** new agricultural education programs began
- 37** agriculture teachers retired
- 73** agricultural education programs operated with a teacher who was not a licensed agriculture teacher
- 7** full-time positions remained unfilled

EXTENSION

The Alabama Cooperative Extension System's county and regional offices foster community development and economic prosperity throughout the state. Research-based educational efforts help homeowners, communities, cities, businesses, agricultural producers and youth increase their economic well-being and improve their lives. Outreach is tailored to meet the challenges of citizens across the state in rural regions, small towns and metro areas. All across Alabama, Extension is working for—and with—citizens to improve communities.

Extension's presence blankets the state. There are 67 county offices, each with a county coordinator; 133 regional, urban and county agents; and 91 agent assistants — all supported by the resources of Alabama A&M University and Auburn University.

Salary: \$32,000-\$43,500



Callie Nelson

County Extension Coordinator

I have a bachelor's degree in family and consumer science and a master's degree in nutrition, diet health and adolescent development. I started working with Extension following graduation. Then, I moved but continued working in family and consumer sciences. I returned to Extension as 4H and youth development agent in Chilton County for 13 years before becoming a county Extension coordinator in Dallas County. I am the office administrator but also implement nutrition education through worksite wellness and workshops about health. I write articles for the newspaper, plan conferences and ensure all county agricultural work is completed. I believe people skills and communication skills, along with a heart for service, are incredibly important.



Christy Hicks

Regional Extension Agent (Agriculture)

I have bachelor's and master's degrees in agronomy and soils. I started working at Auburn University's Turfgrass Research Unit while in graduate school and worked there for eight years. Then, I worked for Monsanto's corn breeding facility in Georgia. I began working in Extension in 2011. I am currently the regional Extension agent for east central Alabama, a 12-county region. I travel around my counties and assist farmers, primarily row crop farmers, by answering questions and solving problems. I believe people in my field must be self-motivated and have problem-solving skills. Issues arise constantly, and it is your job to fix them. The most important skill is flexibility. Calls from farmers can often change my schedule, but it is my job and my joy to go help the farmer.



Michael Dillion

Regional Extension Agent (4H)

I have a bachelor's degree in forestry and am working toward a master's degree in agronomy and soils. I have worked for Extension for three years, before which I worked with a youth ministry agency. With Extension, I am involved with youth projects such as Chick Chain and Pig Squeal, coach a forestry judging team and am an archery coach. I spend time in schools teaching students about agriculture's importance. I also work with school gardens and wildlife habitat projects. 4H serves any kid, anytime, anywhere, so it is a wide-ranging job. Flexibility is important for my job, along with adapting to audiences and unexpected circumstances. Communication skills, approachability, time management and being service-oriented are also vital.

AG BUSINESS



Ashley Jeffers

Certified Appraiser Salary: \$45,000-\$125,000 | Average: \$65,000

I have a bachelor's degree in agriculture business, as do most people in my field. I worked for First South Farm Credit for nine years before moving to Alabama Ag Credit, where I have been for four years. I keep up with current market trends with land, cattle and equipment. This allows me to provide accurate evaluations so we, as a company, can make sound lending decisions to farmers and landowners in our area. Interpersonal skills are incredibly important because of customer interactions. Computer skills, writing, self-discipline, a strong work ethic and being adventurous are also important because no two days are the same. Alabama Ag Credit is my employer of choice, but others include Farm Credit and independent fee appraisers contracted through local banks.



Salary: \$50,000-\$65,000

Insurance Specialist

What you do: Review farms' insurance needs and provide adequate coverage.

What it takes: Bachelor's degree in agriculture.

Salary: \$43,561-\$71,110
Average: \$57,192



Loan Officer

Commodity Director

What you do: Promote specific commodities and work with farmers on public policy impacting their farms.

What it takes: Bachelor's degree in an agricultural field.



Salary: \$40,000-\$75,000
Average: \$55,000

What you do: Create and increase loan portfolios, including term, mortgage and operating loans.

What it takes: Bachelor's degree in ag business, finance or business administration.

What you do: Analyze, report and give advice to a farmer for their financial well-being. Manage financial records, accounts, budget, personnel and accounting tasks.

What it takes: Bachelor's degree in agricultural business, accounting, finance or business administration.

Farm Manager

Salary: \$22,500-\$63,000
Average: \$43,583





59%

**OF AGRICULTURAL COMPANIES EXPECT THEIR
WORKFORCE TO INCREASE IN SIZE
IN THE NEXT 2 YEARS.**



Salary: \$45,225-\$81,163
Average: \$62,452

Marketing Specialist

What you do: Help the company reach sales goals by getting the appropriate message to the public.

What it takes: Bachelor's degree in agricultural business, marketing, communications, education or business administration.

Public Relations or Ag Communications

What you do: Develop the company's brand and media relations.

What it takes: Bachelor's degree in agricultural business, marketing, journalism, communications or business administration.



Salary: \$24,440-\$56,000
Average: \$45,677

Salary: \$16,500-\$65,325
Average: \$47,448

Customer Service Rep



What you do: Act as a liaison between customers and the company and ensure clients are satisfied.

What it takes: Associate degree in agricultural business or related field.

Warehouse/Facility Manager

What you do: Supervise staff security processes and procedures.

What it takes: Bachelor's degree in agricultural business.



Salary: \$21,424-\$125,000
Average: \$64,567

Sales Representative Salary: \$42,261-\$90,667 | Average: \$64,838



Christine Weaver

I work in agricultural sales at Syngenta in California. I have a bachelor's degree in agronomy and soils and a master's degree in entomology, but for my job, only a bachelor's is required. I have worked with Syngenta for two years and sell the AgriEdge offer to growers. The AgriEdge offer encompasses our portfolio including record-keeping software, a cost sharing opportunity and personalized service for those components. I work with growers, retail representatives and independent consultants to sell my product. I believe communication skills, public speaking and computer skills, especially Excel, are important to my job, along with science to understand the portfolio products. Numerous companies employ agricultural sales representatives. Examples are Syngenta, DuPont, Monsanto, Pioneer, Bayer, Dow, Helena, Crop Production Services and others. If you are willing to move, agriculture can take you anywhere.

ANIMAL SCIENCES



Dr. Allison Trotter
Salary: \$80,000

Veterinarian

I have my bachelor's degree in animal sciences and a Doctorate of Veterinary Medicine, a requirement for veterinarians. I graduated vet school in May 2008 and started working as an associate at a clinic, which I now own. I believe people skills are incredibly important in my field. Most people think they will become a vet and interact with animals, not humans, but that is not the case. Many times an owner is the animal's voice. It is also important to learn time management and how to balance family life with work life. Quick thinking and decision-making skills are also useful. My one regret is not learning more about the business aspect of running a practice while in school. As a licensed veterinarian, you can work in a pre-established practice or start your own practice.



Salary: \$27,569-\$57,000
Average: \$35,391

Livestock Manager

What you do: Care for livestock on a farm or operation.

What it takes: Job experience or an associate degree.

Salary: \$23,016-\$39,483
Average: \$28,324



Vet Tech

What you do: Work with veterinarians to provide necessary medical procedures to ensure animals are healthy.

What it takes: Associate degree.

Poultry Owner/Operator

What you do: Work with a company to produce high-quality chickens or eggs while maintaining company standards.

What it takes: High school diploma, but a bachelor's degree is helpful. Ability to get a loan because poultry houses cost \$190,800 to \$377,784 each, and most farms have at least four houses.



Estimated Net Income:
Years 1-10, about \$40,000
Years 16+, estimated \$100,000

Field Service Representative

What you do: Serve as liaison between the company and the grower. Help the company produce the highest quality product at the lowest possible input cost.

What it takes: Bachelor's degree in animal or poultry science.



Salary: \$45,000-\$70,000
Average: \$52,000

AG BUSINESS

Ag Contractor Salary: \$35,182-\$64,731 | Average: \$49,012



Dennis Moore

There are no mandatory educational requirements for my job. I have a high school diploma and attended trade school. I worked at a cotton mill for five years and worked on a farm for two more years. Then, I worked at the fire department for 27 years before retiring. During most of this time I was building barns, which I now do full time and stay extremely busy. I manage two crews. Our main focus is to build pole barns for farmers. Recently, we started building shops and barn houses. The main skills needed are carpentry and knowing how to work with your hands. But some skills often overlooked are eagerness to learn, willingness to listen and a strong work ethic. If a worker has no experience but is willing to listen and work, they are my favorite people to work with. There is a large opportunity for self-employment in this field, but you can also work for commercial builders and contractors.

Electrician



Salary: \$33,943-\$66,823
Average: \$53,985

What you do: Responsible for wiring and maintenance for mechanical equipment in electrical systems.

What it takes: High school diploma plus special certifications or an associate degree.

Salary: \$53,011



Hydraulics Technician

Maintenance Technician

What you do: Repair agricultural equipment.

What it takes: High school diploma plus special certifications or an associate degree.



Salary: \$29,206-\$70,000
Average: \$53,414

What you do: Install, maintain and repair the hydraulic components of equipment.

What it takes: High school diploma plus special certifications or an associate degree.

What you do: Weld equipment and machines.

What it takes: High school diploma and a welding certificate.

Salary: \$27,608-\$63,689
Average: \$46,636



Welder

A GROWING DEMAND FOR TALENT

**Equals growing opportunities
for students like you.**





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My advice to new farmers is to stay immersed in the news, technology and information pertaining to your industry.

Being a farmer is not a 9 a.m. to 5 p.m. job. It takes work, dedication and effort.

-Stan Usery

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FOOD SCIENCE



Lee Haynes

General Manager Nature's Best Egg Co.

I have a business management degree from the University of Alabama, and an agricultural business degree or business management degree is required for my job. My business is family run, so I have been around and worked there most of my life, but I got officially involved in 2007. I am the general manager of a commercial egg laying operation, which means I manage production, biosecurity, food safety, human resources, marketing, purchasing, supply chain management, logistics and quality control. I am responsible for operations that keep the business running day to day. The most important skills for my job are leadership and management, but mechanical and computer skills are also important. There are numerous family-owned operations in my field, but larger companies like Cal-Maine Foods, Rembrandt Foods and Rose Acre Farms are also options for employment.



Salary: \$49,000-\$86,000
Average: \$62,711

Quality Assurance

What you do: Responsible for abiding by regulatory authority compliance for food company's products. Implement policies, strategies and methodology testing.

What it takes: Bachelor's degree in microbiology, food science or chemical engineering.

What you do: Ensure meat is safe from contamination and the processes follow quality-assurance regulations. Inspect all meat products including poultry, seafood, beef and pork before packaging.

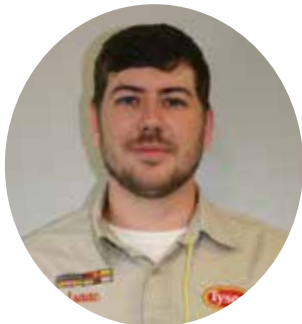
What it takes: Bachelor's degree in food science, microbiology or meat science.

USDA Inspector

Salary: \$35,037-\$73,927
Average: \$51,084



General Production Manager



Isaac Howard

Education beyond high school including special training, vocational school and/or college courses are required for my job. I have a bachelor's degree in poultry science. After graduation, I went to work with Tyson as an operations associate in Arkansas. After eight months as operations associate, I was promoted to supervisor over first processing. Now, I am a general production manager at our Albertville plant. I am responsible for safe and efficient manufacturing of quality products in a manner consistent with company policies and procedures. I maintain the operation of my area, including but not limited to safety, production yields, quality, team member relations, turnover and absenteeism, discipline, payroll, staffing and line speed. Basic computer skills, strong communication skills, problem solving, team skills, time management and people skills are all important for my job. There are numerous companies that employ people in my field including Tyson Foods Inc., Cobb-Vantress, Aviagen, Cal-Maine, Pilgrim's Pride and Wayne Farms.

PLANT SCIENCE



Jamie Brady

Landscape Designer Salary: \$36,033-\$92,194 | Average: \$59,013

I own a landscaping business. There is no degree requirement to own a landscape business, but I believe my education allowed me to be more successful and provide my customers with superior service. I have a bachelor's degree in horticulture with an emphasis on landscape design. I started my business in 2002 and have several roles as president and owner of Cutting Edge Lawn Service. I design all our landscapes as well as consult with potential customers. I also oversee two superintendents who manage 15 employees. I complete office duties and handle public relations for the company. I believe communication skills are important because you must understand and provide the customer what they want. Knowledge of computers, plant types, growth patterns and irrigation is helpful. There is a large opportunity for self-employment in landscape, but you could also work for an established lawn care company, government or commercial companies.



Salary: \$31,000-\$80,000
Average: \$48,935

Agronomy Sales

What you do: Sell agronomic products to customers, along with providing support and knowledge about the products.

What it takes: Bachelor's degree in agronomy, crop science, soil science, biology, horticulture or agriculture business.

Salary: \$18,720-\$45,760



Landscape Worker

What you do: Plant, grow and maintain plants on a property.

What it takes: High school diploma and experience.

Custom Applicator

What you do: Ensure application equipment is working and properly apply pesticides or fertilizers in fields.

What it takes: High school diploma or associate degree in agronomy.



Salary: \$34,000


Golf Course Superintendent

What you do: Oversee golf course management, maintenance and operations.

What it takes: Associate or bachelor's degree in agronomy or horticulture.



Salary: \$20,000-\$41,000



“ My biggest advice to new farmers is to look for and take opportunities.
Get involved, meet new people and continue learning.

Your operation is only as good as you make it, so put in the effort to make it successful.

-Garrett Henry

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ENVIRONMENTAL SCIENCE/NATURAL RESOURCES

Biosystems Engineer Salary: \$44,904-\$70,864 | Average: \$57,337



Zac Lee

I have a bachelor's degree in biosystems engineering from Auburn University, but any engineering degree is accepted in my field. I interned with International Paper twice during college, and after graduation, I began working full time in Manufacturing Excellence. In my current role, I use engineering and waste reduction to ensure continuous improvement across the company. We partner with technical experts to develop projects that help achieve our goal of cost reduction. My day-to-day schedule is fluid, which is what I enjoy about my job. Necessary skills are communicating in writing and speech, working with a team, being professional and being willing to get out of the office, shake hands, turn wrenches, get dirty and learn outside of a textbook. There are numerous companies that hire biosystems engineers, such as Georgia-Pacific, International Paper, Southern Company, Caterpillar, government agencies and private consulting firms. We can work anywhere and do anything a civil, chemical or mechanical engineer does.



Salary: \$38,360-\$61,680

Conservation Officer

What you do: Responsible for protecting wildlife and ensuring local laws and regulations are upheld when hunting and fishing.

What it takes: Associate degree, plus experience may suffice. Preferably a bachelor's degree in biology, wildlife management or criminal justice.

Salary: \$43,160-\$89,115



Lab Technician

What you do: Support conservationists and environmental scientists in laboratory research.

What it takes: Associate degree in natural resources, soil science, biology, horticulture, plant physiology or other related fields.



**Salary: \$25,000-\$31,000
Average: \$28,000**

Forester

What you do: Manage forested land either through private industry, the government or as a consultant.

What it takes: Bachelor's degree in forestry.

Logger

What you do: Cut down and transport trees for the lumber industry.

What it takes: There is no degree requirement.



Salary: \$31,297-\$44,337

EDUCATION BEYOND HIGH SCHOOL

Associate Degrees in Agriculture (2-Year Programs)

AGRICULTURAL PRODUCTION

Wallace State Community College
in Hanceville

AGRICULTURE

Jefferson State Community College

ENVIRONMENTAL TECHNOLOGY

Northwest Shoals Community College

FORESTRY

Lurleen B. Wallace Community College

HORTICULTURE

Calhoun Community College
Ingram State Technical College
Wallace State Community College
in Hanceville

LANDSCAPE OPERATIONS MANAGEMENT

Faulkner State Community College

TURF MANAGEMENT

Faulkner State Community College

VETERINARY TECHNOLOGY

Faulkner State Community College
Jefferson State Community College

WATER AND WASTEWATER TREATMENT

Northwest Shoals Community College

Bachelor's Degrees in Agriculture (4-Year Programs)

AUBURN

- Agricultural Business & Economics
- Ag Communications
- Agriscience Education
- Agronomy & Soils
- Animal Sciences
- Biosystems Engineering
- Environmental Science
- Fisheries & Allied Aquaculture
- Food Science
- Horticulture
- Poultry Science

ALABAMA A&M

- Biology
- Plant Science
- Forestry
- Environmental Science
- Food Science
- Animal Bio-Health Sciences

TUSKEGEE

- Animal Science
- Poultry Science
- Biology
- Chemistry
- Environmental Science
- Forestry
- Natural Resources
- Wildlife
- Ecology
- Plant & Soil Sciences
- Food Science
- Nutritional Science



..... Will you be the next face in agriculture?



SOURCES

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www1.salary.com

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