CAREER OPPORTUNITIES in agriculture
NDFB recently developed a student membership to help young people find their future ag career.

ndfb.org/urfuture/
Farm management and operations:

**Farm Manager/Operator:** Oversees day-to-day operations, including crop management, livestock care, and business administration. May include financial management, marketing, and sales.

Education: Bachelor’s degree in agriculture or related field preferred, although experience in farming may be sufficient.

Salary range: $40,000 to $100,000 per year, depending on size and type of farm.

**Livestock Manager:** Responsible for care and management of farm animals, including feeding, breeding, and medical treatment. May include marketing and sales of livestock products.

Education: Bachelor’s degree in animal science or related field, although experience in livestock management may be sufficient.

Salary range: $35,000 to $75,000 per year.
**Agricultural Technician:** Assists with day-to-day operations, such as planting, harvesting, and maintenance of equipment.

Education: High school diploma or equivalent typically required, although an associate’s degree in agriculture or a related field may be preferred.

Salary range: $25,000 to $50,000 per year.

**Precision Ag Specialist:** Uses GPS and remote sensing to improve crop yields and reduce waste. May work for government agencies, universities, or private companies.

Education: Bachelor’s degree in agriculture or a related field preferred, although experience in precision ag may be sufficient.

Salary range: $45,000 to $90,000 per year.

**Diesel Mechanic:** Responsible for diagnosing and repairing diesel engines and related systems.

Education: High school diploma required, and a certificate or associate’s degree in diesel technology from vo-tech school.

Salary range: $56,000 to $80,000 per year.
**Welder:** Uses a variety of tools and techniques, including gas tungsten arc welding (GTAW), gas metal arc welding (GMAW), and shielded metal arc welding (SMAW).

Education: High school diploma or equivalent generally required. Vocational schools, community colleges, and technical institutes offer welding training programs. Certification through the American Welding Society (AWS) is often preferred by employers.

Salary range: $31,000 to $50,000 per year.

**Supply Chain Manager:** Oversees movement of agricultural products from farm to market, including transportation, storage, and distribution. May work for agricultural cooperatives, food processors, or logistics companies.

Education: Bachelor’s or master’s degree in supply chain management, business, or a related field.

Salary range: $60,000 to $120,000 per year.
Ag sciences and research

**Agronomist:** Studies plants and soil to improve crop yields and overall farm productivity. May work in research and development, or on a farm directly, advising on soil health, fertilization, irrigation, pest control, and other ag practices.

Education: Bachelor’s degree in agronomy or related field.

Salary range: $40,000 to $90,000 per year.

**Ag Engineer:** Designs and develops new technology and equipment for the agriculture industry, such as irrigation systems, machinery, and renewable energy systems. May also work on environmental issues, such as waste management and pollution control.

Education: Bachelor’s degree in agricultural engineering required.

Salary range: $50,000 to $100,000 per year.
Soil Scientist: Studies physical, chemical, and biological properties of soil to improve crop yields and environmental sustainability. May work in research and development, or companies that advise on soil health, fertilization, and erosion control.

Education: Bachelor’s or master’s degree in soil science.

Salary range: $40,000 to $90,000 per year.

Seed Analyst: Tests and evaluates seed quality for planting, including germination rates and disease resistance. May work for seed companies or government agencies.

Education: Bachelor’s degree in plant science or related field, although experience in seed analysis may be sufficient.

Salary range: $30,000 and $60,000 per year.

Biologist: Studies the biology of plants and animals in the context of agricultural systems, with a focus on improving crop yields, reducing environmental impact, and promoting sustainability. May work in research and development or with companies implementing biological strategies.

Education: Bachelor’s or master’s degree in biology required.

Salary range: $50,000 to $100,000 per year.
**Biotechnologist:** Uses genetic engineering and other techniques to improve crop yields, increase resistance to pests and disease, and reduce environmental impact. May work in research and development, or companies developing and implementing biotechnology strategies.

Education: Bachelor’s or master’s degree in biotechnology or genetics.

Salary range: $50,000 to $110,000 per year.

**Fish and Wildlife Biologist:** Manages the state’s fish and wildlife populations, habitats, and ecosystems. Jobs may include research, conservation, and management of fish and wildlife resources.

Education: Bachelor’s degree in fisheries and wildlife biology, ecology. Some employers may require a master’s degree or Ph.D.

Average salary: $60,000 a year with experienced professionals earning up to $90,000 a year.
**Food Scientist:** Studies food and its properties, including its nutritional value, safety, and preservation. Job duties include conducting research on food products, developing new food products and improving existing ones, developing food safety and quality control programs and analyzing food samples for nutrient content.

Education: Bachelor’s degree in food science, biology chemistry or related field. Some may require master’s or Ph.D. in food science.

Salary range: $62,000 to $100,000 a year.

**Large Animal Veterinarian:** Provides medical care and treatment to livestock and other large animals, such as horses, cattle, sheep, and pigs. May work in private practices, veterinary clinics, or for government agencies.

Education: A Doctor of Veterinary Medicine (DVM) degree is required. This typically involves completing a four-year veterinary program accredited by the American Veterinary Medical Association (AVMA) after earning a bachelor’s degree.

Salary Range: $75,000 to $150,000 a year.
Agriculture education and communication

Communication specialist: Works to promote and educate the public about agriculture. They may write articles, produce videos, or manage social media accounts for agricultural organizations or businesses.

Education: Bachelor’s degree in communications, journalism, or a related field.

Salary range: $35,000 to $70,000 per year.

Ag Educator: Teaches students about agriculture, including farming, livestock management, and environmental sustainability. They may work in schools, colleges, or extension programs.

Education: Bachelor’s or master’s degree in agricultural education.

Salary range: $30,000 to $80,000 per year.
**Extension Agent:** Provides education and outreach to farmers, ranchers, and other members of the community on topics such as crop production, pest management, and business planning. They may work at the university level or at the county level.

**Education:** Bachelor’s or master’s degree in agriculture or a related field.

**Salary range:** $40,000 to $80,000 per year.
Agriculture business and economics

**Equipment Sales:** Sells and leases equipment such as tractors, combines, and irrigation systems to farmers and ranchers. May work for dealerships, manufacturers, or leasing companies.

Education: High school diploma or equivalent, although sales experience and agriculture equipment knowledge is important.

Salary range: $35,000 to $90,000 per year.

**Ag Sales Representative:** Sells products and services related to agriculture, such as seeds, chemicals, and financial services. May work for a manufacturer or distributor, or as an independent contractor.

Education: Bachelor’s degree in agriculture or a related field, although sales experience may be sufficient.

Salary range: $40,000 to $90,000 per year.
**Agricultural Loan Officer:** Evaluates loan applications from farmers and ranchers, and helps them obtain financing for equipment, land, and other expenses. May work for banks, credit unions, or government agencies.

Education: Bachelor’s degree in agriculture or finance.

Salary range: $40,000 to $90,000 per year.

**Ag Economist:** Analyzes market trends and economic data related to agriculture, with a focus on developing strategies to improve farm profitability and sustainability. May work for government agencies, universities, or private companies.

Education: Master’s or doctoral degree in ag economics.

Salary range: $60,000 to $130,000 per year.

**Policy Analyst:** Researches and analyzes policies related to the agriculture industry, including environmental regulations, trade agreements, and farm subsidies. They may work for government agencies, think tanks, or advocacy organizations.

Education: Master’s or doctoral degree in agricultural policy, economics, or a related field is typically required.

Salary range: $60,000 to $120,000 per year.
NDFB is the largest general farm organization in the state with more than 28,000 member-families.

We exist to improve agriculture in our state through advocacy and education.

The three pillars of NDB’s philosophy are freedom, opportunity and self-reliance. The founders of NDFB believed that if individuals were allowed to progress to the fullest of their capabilities, abilities and ambition, a strong national would result.

Learn more at ndfb.org.