THE ANIMAL SCIENCE industry involves the care, maintenance, and use of animals. The industry has a wide range of careers for people who enjoy working with animals and who have a strong background in the biological sciences, math, and agriculture. Job opportunities include animal health, training, nutrition, harvesting, breeding, housing, teaching, and research.

Objective:

Define the major jobs and qualifications in the animal science field.

Key Terms:

- laboratory animals
- service animals

Animal Science Career Descriptions

LIVESTOCK PRODUCTION

Working with livestock is one option when considering a career in the animal science industry. Most of the work of animal scientists concerns livestock (e.g., pigs, cows, chickens, and horses). Owning an animal production business is one way to be involved in livestock production. There are other options if you do not wish to handle the financial risks and responsibilities of a livestock production business.
Farm or ranch worker positions vary based on the knowledge and abilities of the people employed. Farm or ranch workers may feed and move animals, sanitize animal housing, and treat sick animals. On small farms, a wide range of tasks may be involved, but workers at large operations may be able to specialize in a particular work area. In this field, you are expected to learn quickly, to have general livestock knowledge, and to work well with animals.

Farm managers carry out the daily farm operations. They are usually hired by corporate farms, institutional farms (e.g., colleges or universities), or people who own a farm but do not want to be involved in the daily production. Employers generally hire managers with years of experience and some education beyond high school. Tasks performed by a farm manager might include selecting and marketing animals, formulating feed, maintaining herd health, and supervising employees.

**EQUINE, WILDLIFE, FISHERIES, AND SERVICE ANIMALS**

Many careers involve working with pleasure and service animals. Horse industry workers have the opportunity to work with light horses for pleasure or with racehorses. In this job, you might begin as a stable attendant or a racehorse trainer. As a stable hand, you would spend most of your time cleaning the barn and feeding the horses. The more experience and education you receive, the more opportunities you will have to advance in the career and work as a horse trainer, riding instructor, or stable manager.

People with an interest in the outdoors and wildlife should research a career in the game and fisheries sector of the animal science industry. Wildlife conservation officers work to educate the public about fish and wildlife in addition to enforcing game and fish laws. Wildlife conservation officers are usually hired by and work closely with state and federal agencies. Experience and a college degree in a wildlife field are highly recommended.

Fish hatchery technicians raise and manage fish that are used to stock private or public ponds, lakes, or streams. They care for brood fish, tend eggs, maintain water quality, feed fish, provide for the health of fish, and manage the facilities. Fish hatchery technicians work under the direction of a fisheries biologist—a job that requires an advanced college degree.

**Service animals** assist people with special needs. As a result, working with service animals can require years of specialized training. Job opportunities include training leader dogs for the blind, managing draft animals, and working with companion animals. Most draft animals are raised as a hobby, but many countries still use them as a major source of power.
Laboratory animal production is a complex field that involves raising and keeping animals under the best possible conditions. Laboratory animals are animals used in research to improve human and animal life. Workers in this field are required to have in-depth knowledge of science, chemistry, and biology as well as an interest in animal research.

AGRISCIENCE AND BIOTECHNOLOGY

Several exciting and rewarding science-oriented careers exist in the animal science industry. Animal scientists study animals and work to develop improved production methods. Some careers in the animal science field are animal nutrition specialists, animal reproduction specialists, geneticists, chemists, and biotechnologists. You can also be an animal laboratory assistant; duties include helping animal scientists with experiments, caring for lab animals, and raising laboratory animals.

A job many do not think about in the animal science field is engineering. Agricultural engineers work with animal facilities, waste management, and environmental impact in addition to working on the improvement of animal products. An engineering job requires a bachelor’s degree and the ability to assess a problem and find a solution.

Wildlife biologists work with wildlife animals and their habitats. They may study one particular endangered species or concentrate on improving the environment for many species. A college education is required for most entry-level jobs in agriscience and technology. Advanced degrees, such as a master’s or a doctorate, are needed for upper-level positions.

ANIMAL SERVICE

Veterinarians and veterinary technicians have demanding, yet rewarding, jobs. Veterinary medicine is a field for people who love animals and who have good people skills. The job market outlook in the field of treating and controlling animal injuries is growing each year. There-
fore, many opportunities exist for people who graduate with a Doctorate of Veterinary Medicine or a veterinary technician degree. Veterinarians can work at private or corporate clinical practices with large or small animals or with specialty and exotic animals at a zoo. They can also teach and research in veterinary medicine.

People who provide for the needs of animals and help with marketing are important in the animal industry. The sales and service area is one of the largest and fastest growing areas of animal science. In this field, workers might sell feed, ensure quality products, sell retail products, service equipment, operate stockyards, and provide information to producers. Many of the sales positions related to livestock production require a college education in animal science or a related area.

Livestock buyers may work for themselves or work for a major packing company. It is important for buyers to know and understand industry and consumer demands in the meat market. Also, training in animal selection is a requirement.

**ANIMAL SCIENCE EDUCATION AND COMMUNICATION**

Jobs in education and agricultural communication are important in sharing animal science knowledge with the community. Agriscience teachers work in public or private schools and teach basic agriculture and specialized classes to students of all ages. Agriscience teachers must be well versed in the total program of agricultural education, which includes FFA, supervised agricultural experience (SAE) programs, and classroom instruction. Agriscience teachers need a Bachelor’s degree in agriculture and a certificate to teach in their state of residence.

Agriculture extension agents work with local producers to improve production or to solve problems. A Bachelor’s degree in agriculture is needed. This job requires a strong background in animal production and the ability to relate to the general public.

Working with the public is also a top priority in the field of agricultural communication. People in this career share information about agriculture and animal science to producers and consumers. An agricultural communication specialist may work with newspapers, radio stations, or television stations. In addition, they may work for companies in public relations departments. This career requires a bachelor’s degree in communications or agriculture. Some colleges offer the specific degree of agricultural communications.
**Summary:**

Many jobs are available in the animal science industry. Some deal directly with animals, but others involve little contact with animals. Career areas in which you would work closely with animals include livestock production operator, wildlife conservationist, trainer and breeder, veterinarian, and researcher. More indirect career areas include marketing, communications, education, or governmental regulatory agencies. Most of these careers require a bachelor's degree in some area of agriculture, and all of them require a background in math and the biological sciences in addition to a general love of animals.

Some entry-level positions (e.g., farm workers) do not require post-secondary education. However, the bulk of other available jobs in this field require a minimum of a bachelor’s degree and often desire experience. Additional education and specialized experience can lead to more opportunities in this field.

**Checking Your Knowledge:**

1. Who selects and markets animals, formulates feed, maintains herd health, and supervises employees?
2. What can be used to assist people with special needs?
3. What is used in research to improve human and animal life?
4. Who works with animal facilities, waste management, and environmental impact in addition to working toward the improvement of animal products?
5. Who is typically in charge of local FFA chapters and SAE programs?

**Expanding Your Knowledge:**

Interview a person currently employed in an animal science career. Write a paper discussing the interview. Then prepare a five-minute presentation on the person you interviewed and his or her career choice.

**Web Links:**

- Careers in Agriculture
  [http://www.gaaged.org/Careers_in_Agriculture/index.htm](http://www.gaaged.org/Careers_in_Agriculture/index.htm)

- National FFA Organization Agriculture Education
  [http://www.ffa.org](http://www.ffa.org)

- Agricultural Career Profiles
  [http://www.mycaert.com/career-profiles](http://www.mycaert.com/career-profiles)