

## VETERINARY & ANIMAL SCIENCES... NOW WHAT?

### Quick Facts: Veterinarians

<b>2020 Median Pay</b>	\$ 99,250 per year
<b>Entry-Level Education</b>	Doctoral or professional degree
<b>Work Experience in a Related Occupation</b>	None
<b>On-the-job Training</b>	None
<b>Number of Jobs, 2019</b>	89,200
<b>Job Outlook, 2019-29</b>	16% (Much faster than average)
<b>Employment Change, 2019-29</b>	14,200

[Found on the Occupational Outlook Handbook <https://www.bls.gov/ooh/healthcare/veterinarians.htm>]

### What is Animal Science?

Animal science is the study of animals that live alongside humans. People rely on animals for food, fiber, labor and companionship. Using knowledge from the fields of physiology, biology, nutrition, genetics, husbandry, molecular biology, ethics, animal behavior, public health, and communication, animal scientists help us to understand and manage these animals. Animal science is used to maximize the efficiency, output, safety, and sustainability of farming and food production techniques. A degree in animal sciences can prepare you for a wide range of jobs in agriculture and related biomedical fields. Some with an animal science degree plan to continue on to veterinary school after graduation.

### What Can I Do With A Bachelor's Degree In Animal Science

Animal Health Product Sales	Housing & Environmental Quality Specialist
Feed Sales/Management	Livestock Insurance
Livestock Equipment Sales/Mgt	Representative
Livestock Procurement	Animal Scientist
Field Representative	Researcher
Consultant	Food/Meat Product Development
A.I. Breeding Technician	Quality Assurance
Livestock Feedlot Operator	Food Service Management
Research and Lab Technician	Farm Management
Public Relations Specialist	Dairy Equipment Specialist
Market Forecaster	Market Reporter
Livestock Marketing Specialist	Meat Grade
Sales	Financial Analyst
Technical Representative	Financial Representative
Teacher	Extension Specialist

## Who Could I Work For?

- Animal breeders
- Animal shelters
- Biotech companies
- Dairy industry
- Universities and schools
- Equine industry
- Feed manufacturers
- Historic farms
- Veterinary hospitals
- Human societies
- Pharmaceutical companies
- Research foundations
- Wildlife rehabilitation groups
- Zoos
- Federal government agencies, such as:
  - Department of Agriculture
  - Department of Interior
  - Department of Health and Human Services
  - Environmental Protection Agency
- State government agencies, such as:
  - Department of Agriculture
  - Department of Commerce
  - Department of Environmental Protection
  - Department of Health

### Farm Organizations

Beef cattle production

-Stocker or grower programs

-Feedlot

- Milk production

-Swine

-Farrowing operations

-Grower/finisher operations

-Farrow to finish

-Sheep

Feed/slaughter inspection

-Private consulting

Wheat pasture growing/finishing programs

-Poultry

-Broiler production

-Egg production

-Horses

-Mare Breeding Farm

-Training facility

Livestock feed

-Production, Sales, and Distribution

### Technology Development and Application (Biotechnology)

-Laboratory technical support

-Animal caretakers

-Research scientists

-Genetics and Animal Breeding

-Population genetics

-Molecular genetics

-Genetic engineering

-Reproductive management

-Endocrinology

-Cloning

-Embryo technology

-Nutrition

-Feeding programs

-Nutrition/reproduction interactions

-Nutrition/health/immunity interactions

### Food Science

-Product development

-Food processing

-Fermentation

Grain companies

### Veterinary Medicine

-Practice

-Research

-Product development

-Teaching

-Inspection

### Meat or dairy foods

-Production

-Product development

-Quality control

-Distribution and marketing

**Teaching** (high school, jr college or university)

## Where Might I Do an Internship in Animal Science?

Umass Amherst Animal Science Majors Have Done Internships At The Following Sites:

Agri-Mark	Franklin Park Zoo	Sova Animal Hospital
Amherst (Town of)	Humane Society	Stewart Equine Clinic
Andover Animal Hospital	Jon Turati Farrier Service	The Alex Foundation
Associates of Cape Cod	Lincoln Park Zoo	Tufts Veterinary School
Banfield Pet Hospital	Mass Audobon	UMass Mullins Center
Biogen Idec Inc	Medicine Mammals	Vet's First Choice
Blue Star Equiculture	MIT Div. of Comparative	Walt Disney World
Cambridge Veterinary Care	Medicine	Westford Emergency Animal
CampusLIVE Inc	MSPCA	Hospital
CBSET INC.	New England Aquarium	Westside Animal Clinic
Como Park Zoo/Conservatory	New England Wildlife Center	Windham Animal Hospital
Dakin Pioneer Valley	N. Attleboro Animal Clinic	Wildlife Center Silicon Valley
Days End Farm Horse Rescue	Novartis	Wyeth Biotech
Diggity Service Dogs	Rep. Chris Hodgkins	Zoo in Forest Park (The)
Drumlin Farm & Sanctuary	Riverbend Animal Hospital	Zoo New England
	Rozalia Project	

## Career Planning Resources & Websites

UMass Amherst CNS Career Center	<a href="http://www.cns.umass.edu/careers">www.cns.umass.edu/careers</a>
UMass Handshake Database of Internships & Jobs	<a href="https://umass.joinhandshake.com/">https://umass.joinhandshake.com/</a>
FOCUS2 Career and Education Planning	<a href="http://www.umass.edu/careers/planning">www.umass.edu/careers/planning</a> for sign-in button
What Can I Do With This Major?	<a href="https://www.umass.edu/careers/planning">https://www.umass.edu/careers/planning</a>

*(Click on "What Can I do with this Major" icon on the right-hand column.)*

UMass VASCI Opportunities Page	<a href="http://www.vasci.umass.edu/undergraduate">www.vasci.umass.edu/undergraduate</a>
Careers in Animal Science	<a href="https://www.vasci.umass.edu/sites/vasci/">https://www.vasci.umass.edu/sites/vasci/</a>
Bureau of Labor Statistics Occupational Outlook Handbook	<a href="http://www.bls.gov/ooh">www.bls.gov/ooh</a>
Animal Care Occupations	<a href="https://www.bls.gov/ooh/personal-care">https://www.bls.gov/ooh/personal-care</a>
Farming/ Agriculture Occupations	<a href="http://www.bls.gov/ooh/management/farmers">www.bls.gov/ooh/management/farmers</a>
Vet Tech Occupations	<a href="http://www.bls.gov/ooh/healthcare/veterinary">www.bls.gov/ooh/healthcare/veterinary</a>
O-Net: Vet Technologists and Technicians	<a href="http://www.onetonline.org/link/summary/29-2056.00">www.onetonline.org/link/summary/29-2056.00</a>
Massachusetts Career Information System	<a href="http://www.masscis.intocareers.org">www.masscis.intocareers.org</a>
<i>(Click Mass Resident to login with "Amherst/01003" Then click "Occupations" or "Assessments")</i>	

Animal Science Career Guide	<a href="http://www.khake.com/page10.html">www.khake.com/page10.html</a>
Animal Behavior Institute	<a href="http://www.animaledu.com/Careers.aspx">www.animaledu.com/Careers.aspx</a>

Study of Employment Opportunities in USA 2015-20  
Net Vet: Veterinary Career Resources  
Student Resources in Animal Science  
The Fields of Animal Science

[www.purdue.edu/usda/employment/](http://www.purdue.edu/usda/employment/)  
<http://netvet.wustl.edu/vcareer.htm>  
[www.asas.org](http://www.asas.org)  
[www.animalsmart.org/animal-science](http://www.animalsmart.org/animal-science)

## **Animal Science Internships**

Animal Science Internships  
American Veterinary Medical Association  
\* Finding Independent Research On Campus

<http://harvest.cals.ncsu.edu/animal-sci>  
[www.avma.org/ProfessionalDevelopment](http://www.avma.org/ProfessionalDevelopment)  
[www.umass.edu/biochem/undergraduate/lab](http://www.umass.edu/biochem/undergraduate/lab)

### *Agriculture/Animal Science*

Agricultural Industry Jobs  
Animal Science Jobs  
Aquaculture Jobs

[www.agindustryjobs.com](http://www.agindustryjobs.com)  
[www.animalsciencejobs.com/](http://www.animalsciencejobs.com/)  
[www.aquaculturejobs.com](http://www.aquaculturejobs.com)

### *Agriculture/Animal Science (cont.)*

Continental Search Outplacement Inc.  
Hoard's Dairyman

[www.consearch.com/](http://www.consearch.com/)  
[www.hoards.com/intel/150526\\_art5](http://www.hoards.com/intel/150526_art5)

### *Animal Care, Aquariums & Zoos*

Animal Care and Control- NYC  
Animal Care Jobs  
Association of Zoos & Aquariums  
Horse Jobs (North America)  
Metro Pet Jobs  
Pet Sitters

[www.nycacc.org/jobs.htm](http://www.nycacc.org/jobs.htm)  
[www.animalcarejobs.org/](http://www.animalcarejobs.org/)  
[www.aza.org/joblistings/](http://www.aza.org/joblistings/)  
[www.horsejobs.ca](http://www.horsejobs.ca)  
[www.metropets.org/How2help/jobs.php](http://www.metropets.org/How2help/jobs.php)  
[www.pet-sitters.biz](http://www.pet-sitters.biz)

### *Government Agencies*

USA Jobs (All Government Jobs)  
USDA Animal and Plant Health Inspection Service  
[www.aphis.usda.gov/aphis/banner/careers](http://www.aphis.usda.gov/aphis/banner/careers)

[www.usajobs.gov](http://www.usajobs.gov)

### *Natural Resources & Conservation*

Conservation Job Board  
Environment Jobs

[www.conservationjobboard.com](http://www.conservationjobboard.com)  
[www.environmentjobs.com/Index.asp](http://www.environmentjobs.com/Index.asp)

### *Pharmaceutical Companies/Biotech*

Novartis

<https://www.novartis.com/careers>

### *Veterinary Medicine*

Pre-Vet Internships

[www.thebalancecareers.com/pre-vet](http://www.thebalancecareers.com/pre-vet)

American Veterinary Medical Association	<a href="http://www.avma.org/ProfessionalDevelopment/Career">www.avma.org/ProfessionalDevelopment/Career</a>
I Hire Veterinary	<a href="http://www.ihireveterinary.com">www.ihireveterinary.com</a>
Vet Broker	<a href="http://www.vetbroker.com/vet_jobs.htm">www.vetbroker.com/vet_jobs.htm</a>
Vet Jobs	<a href="http://www.vet.com/veterinarian_jobs.html">www.vet.com/veterinarian_jobs.html</a>
Veterinary Jobs	<a href="http://www.veterinaryjobs.com">www.veterinaryjobs.com</a>
Equine Veterinary Medicine	<a href="http://www.thebalancecareers.com/equine-vet">www.thebalancecareers.com/equine-vet</a>

#### *General Search Engines*

Federation of Animal Sciences Societies	<a href="http://www.fass.org/jobs/">www.fass.org/jobs/</a>
Science Careers	<a href="http://jobs.sciencecareers.org">http://jobs.sciencecareers.org</a>
One-Stop Career Centers (search by zip code)	<a href="http://careeronestop.org/jobsearch/findjobs">http://careeronestop.org/jobsearch/findjobs</a>
Glass Door	<a href="http://www.glassdoor.com/index.htm">www.glassdoor.com/index.htm</a>
Indeed	<a href="http://www.indeed.com">www.indeed.com</a>
SimplyHired	<a href="http://www.simplyhired.com">www.simplyhired.com</a>

#### **Professional Organizations (\* = of particular note)**

Many professional organizations' websites have career information on them. You can often use them to search for networking events, meet a mentor in your field of study, find current research, search for internships or jobs, and gain insight into what direction you may wish to pursue within the field.

* American Animal Hospital Association	<a href="http://www.aahanet.org">www.aahanet.org</a>
* American Association for Laboratory Animal Science	<a href="http://www.aalas.org">www.aalas.org</a>
American Association of Zoo Keepers	<a href="http://aazk.org/zoo_career.php">http://aazk.org/zoo_career.php</a>
American Dairy Science Association	<a href="http://www.adsa.org">www.adsa.org</a>
American Kennel Club	<a href="http://www.akc.org">www.akc.org</a>
American Meat Science Association	<a href="http://www.careers.meatscience.org">www.careers.meatscience.org</a>
American Registry of Professional Animal Scientists	<a href="http://www.arpas.org/about.asp?view=what">www.arpas.org/about.asp?view=what</a>
* American Society of Animal Science	<a href="http://www.asas.org">www.asas.org</a>
* American Veterinary Medical Association	<a href="http://www.avma.org/vcc">www.avma.org/vcc</a>
Animal Behavior Institute	<a href="http://www.animaledu.com">www.animaledu.com</a>
Animal Behavior Society	<a href="http://www.animalbehaviorsociety.org">www.animalbehaviorsociety.org</a>
Animal Science Monitor	<a href="http://www.animalsciencemonitor.com">www.animalsciencemonitor.com</a>
ASPCA	<a href="http://www.aspca.org">www.aspca.org</a>
* Association of Zoos and Aquariums	<a href="http://www.aza.org">www.aza.org</a>
Association of Pet Dog Trainers	<a href="http://www.apdt.com">www.apdt.com</a>
Association of Reptilian and Amphibian Veterinarians	<a href="http://www.arav.org">www.arav.org</a>
* Federation of Animal Science Societies	<a href="http://www.fass.org">www.fass.org</a>
Humane Society Academy	<a href="http://www.humanesociety.org">www.humanesociety.org</a>
International Wildlife Rehabilitation Council	<a href="http://www.avma.org">www.avma.org</a>
National Agri-Marketing Association	<a href="http://www.nama.org">www.nama.org</a>
National Animal Control Association	<a href="http://www.nacanet.org/careeropps.html">www.nacanet.org/careeropps.html</a>
National Association of Agricultural Educators	<a href="http://www.naae.org">www.naae.org</a>

\* National Institute of Food and Agriculture  
Veterinary Organizations and Associations (List)

<http://nifa.usda.gov>  
[www.vspn.org](http://www.vspn.org)

## What Does A Veterinarian Do?

Thinking about going onto vet school and curious about the profession?

Veterinarians typically do the following:

- Examine animals to diagnose their health problems
- Treat and dress wounds
- Perform surgery on animals
- Test for and vaccinate against diseases
- Operate medical equipment such as x-ray machines
- Advise animal owners about general care, medical conditions, and treatments
- Prescribe medication
- Euthanize animals

Veterinarians in private clinical practices treat the injuries and illnesses of pets and farm animals with a variety of medical equipment, including surgical tools and x-ray machines. They provide treatment for animals that is similar to what a doctor would do to treat humans.

The following are common types of veterinarians:

**Companion animal veterinarians** treat pets and generally work in private clinics. According to the American Veterinary Medical Association, 77 percent of veterinarians who work in private clinical practice treat pets. They most often care for cats and dogs, but also treat other pets, such as birds, ferrets, and rabbits. These veterinarians diagnose animal health problems, consult with owners of animals, and carry out medical procedures, such as vaccinations and setting fractures.

**Equine veterinarians** work with horses. About 6 percent of private practice veterinarians treat horses.

**Food animal veterinarians** work with farm animals such as pigs, cattle, and sheep. About 8 percent of private practice veterinarians treat food animals. They spend much of their time at farms and ranches treating illnesses and injuries and testing for and vaccinating against disease. They also may advise owners or managers about feeding, housing, and general health practices.

**Food safety and inspection veterinarians** inspect livestock and animal products and enforce government food safety regulations. They may inspect livestock, checking the animals for *E. coli* and other transmittable diseases. They check for food purity and sanitation by inspecting food products, animals and carcasses, and slaughtering and processing plants. Others may work along the country's borders in food safety and security, ensuring abundant and safe food supplies.

**Research veterinarians** work in laboratories, conducting clinical research on human and animal health problems. These veterinarians may perform tests on animals to identify the effects of drug therapies, or they may test new surgical techniques. They may also research how to prevent, control, or eliminate food- and animal-borne illnesses and diseases.

## Important Transferable Qualities To Include On Your Resume for ANY Animal Sciences Job

**Compassion.** Veterinarians must be compassionate when working with animals and their owners. They must treat animals with kindness and must be sensitive when dealing with the owners of sick pets.

**Decision-making skills.** Veterinarians must decide the correct method for treating the injuries and illnesses of animals. Deciding between euthanizing and treating a sick animal, for instance, can be very difficult.

**Interpersonal skills.** Strong communication skills are essential for veterinarians, who must be able to explain treatment options to animal owners and give instructions to their staff.

**Management skills.** Management skills are important for those veterinarians who are in charge of running private clinics or laboratories. In these settings, they are responsible for providing direction, delegating work, and overseeing daily operations.

**Manual dexterity.** Manual dexterity is important for veterinarians because they must control their hand movements and be precise when treating injuries and performing surgery.

**Problem-solving skills.** Veterinarians need strong problem-solving skills because they must figure out what is ailing animals. Those who test animals to determine the effects of drug therapies also need excellent diagnostic skills.

## What Do Employers Look For? (NACE 2020 Job Outlook for Students)

