4-H Veterinary Science Project



WHAT'S IT ALL ABOUT?

The 4-H veterinary science project allows you to learn about animal health and its effect on public health.

- » Learn the value of scientific research and its influence on animals and their health.
- » Gain knowledge of animal production differences.
- » Evaluate animal health to gain life skills such as problem solving.

THE BIG PICTURE

Starting Out:

- Identify breeds of major species of livestock and companion animals.
- >> Explore the various roles of animals in society.
- » Understand the differences between species in body styles, systems, breeds and life stages.
- **»** Explore the animal's basic needs.
- Learn how veterinarians and owners work together to keep animals healthy.
- Investigate animal science and veterinary science careers.
- **»** Discover and identify the uses of veterinary tools.
- Take a tour of veterinary medicine facilities in your area.
- » Locate and name common parts of a variety of animals.

Learning More:

- Discover the importance of food safety and quality assurance.
- Explore biosecurity relating to human and equipment traffic on farms.
- > Create an animal health management plan.
- Consider examples of ethics and animal welfare situations.
- Develop and maintain accurate health records for livestock and pets.
- Investigate health issues related to body systems, diseases, parasites and immunity.
- Describe common domestic animal health issues and their effect on people.
- **»** Explore the differences in animal digestive systems.
- » Interview a veterinarian.

Expanding Horizons:

- » Help younger 4-H members explore a veterinary science project.
- Incorporate science into understanding of genetics, animal reproduction and health.
- Research veterinary technology and procedures.
- Identify the transfer of diseases between animals and humans.
- **»** Describe the principles of preventive medicine.
- Compare and contrast health management plans for various animal types.
- » Observe and describe animal behavior in different species.
- » Job shadow a veterinarian.
- » Research laws related to veterinary practices.
- » Create a biosecurity informational sheet and kit for 4-H'ers to keep at their livestock areas.



CURRICULA & RESOURCES

Curricula — Other States

- Texas A & M AgriLife Extension Veterinary Assistant Training: http:// aevm.tamu.edu/
 - Preparatory Training for the Veterinary Assistant (SP-444)
- University of Nebraska 4-H Vet Science Series: http://4h. unl.edu/web/4hcurriculum/ veterinaryscience
 - The Normal Animal (EC 29981)
 - Animal Disease 2 (4H 48)
 - Animal Health and Its Relationship to Our World 3 (4HI33)

National 4-H Curricula

http://www.4-h.org/resource-library/curriculum/

- » Veterinary Science
 - From Airedales to Zebras
 Veterinary Science 1 (08048)
 - All Systems Go! Veterinary Science 2 (08049)
 - On the Cutting Edge

 Veterinary Science 3
 (08050)
 - Veterinary Science Helper's Guide (08051)

Other Resources

- Michigan State University College of Veterinary Medicine: http://cvm.msu.edu/
- American Veterinary Medical Association: www.avma.org/
- Association of American Veterinary Medical Colleges: www.aavmc.org/
- >> Healthy Pets Healthy People: www.cdc.gov/healthypets/

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FOCUS ON VETERINARY SCIENCE

Science

- Review scientific publications to determine animal treatment options.
- » Critically evaluate animals' health based on a regional approach.
- Interpret case studies and determine animal treatment needs.
- Research genetic mutations and their impact on various species.
- » Observe, document and explore animal behaviors.

Life Skills

- We critical-thinking, problemsolving and decision-making skills to make good decisions when caring for animals.
- Practice personal resiliency through successes and challenges in your study of veterinary science.
- Create a resume to use for volunteering at veterinary clinics.

Citizenship & Leadership

- **»** Volunteer at a local veterinary clinic or humane society.
- Start a campaign encouraging pet owners to neuter and spay their pets.
- Organize a pet first-aid class through your local Red Cross chapter.
- Collect pet food for the H.E.A.R.T of 4-H: Helping Elderly and Animals Reside Together.

Communication

- Give an educational presentation on vaccinating animals.
- Develop an animal health management plan with a veterinarian.
- Help a certified Youth Pork Quality Assurance (PQA) Plus staff member present a PQA session.
- Develop a poster or video for your county fair.

HOW CAN YOU GET INVOLVED?

- Contact your local Michigan State University (MSU) Extension office for workshops, activities and events.
- If you are interested in a college education in animal science or veterinary medicine, visit MSU's website at www.msu.edu to explore those major.
- Assist with a local food safety quality assurance class for younger 4-H members.
- Set up a local animal disease emergency preparedness and response team.
- Start veterinary science-related projects at your county 4-H club meetings.
- Attend the Veterinary Science Teen and Adult Leaders Workshop at Kettunen Center.
- Attend the Michigan 4-H Animal and Veterinary Science Camp (registrations available online).

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