



Careers with Animals: Introduction

Created: 08/2018 by the National FFA Organization

The “Careers with Animals” lesson series was created in partnership between the National FFA Organization and Purdue University–Animal Sciences. The lesson set is comprised of six lesson plans that will take students through all aspects of the various career areas within the animal industry.

STUDENT LEARNING OBJECTIVES:

After completing these activities, students will ...

1. Describe the numerous career opportunities within the animal systems career focus area.
2. Identify skills needed in careers with animals.

TIME REQUIRED: 45 minutes

RESOURCES:

1. AgExplorer, AgExplorer.ffa.org
2. Prezi, http://prezi.com/gfk3rhbnb8tr/?utm_campaign=share&utm_medium=copy
3. Video: “STEM Careers: Improving Animal Health” Virtual Field Trip to Zoetis Chapter 2, <https://agexplorer.ffa.org/virtual-field-trips/stem-careers-improving-animal-health/>

EQUIPMENT AND SUPPLIES NEEDED:

1. A copy of the “Introduction to Careers in the Animal Industry” worksheet for each student
2. A copy of the “Animal Careers: A Closer Look” worksheet for each student
3. A copy of the “Now That I’ve Thought About It ...” worksheet for each student
4. Internet access to play the video in real time (or embed it in a PowerPoint ahead of time) and to use the Prezi presentation
5. Computer access, ideal for students to work in pairs or small groups

THIS QUICK LESSON PLAN WOULD WORK WELL AS:

1. An introduction to a careers in the animal industry unit.

THESE ACTIVITIES ARE ALIGNED TO THE FOLLOWING STANDARDS:

AFNR Performance Element

- CS.02: Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role of agriculture, food and natural resources (AFNR) in society and the economy.
- CS.05: Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.

FFA Precept

- FFA.PL-A.Action: Assume responsibility and take the necessary steps to achieve the desired results, no matter what the goal or task at hand.
- FFA.PL-C.Vision: Visualize the future and how to get there.
- FFA.PL-E.Awareness: Understand personal vision, mission and goals.
- FFA.PL-F.Continuous Improvement: Accept responsibility for learning and personal growth.
- FFA.PG-I.Professional Growth: Assume responsibility for attaining and improving upon the skills needed for career success.
- FFA.PG-J.Mental Growth: Embrace cognitive and intellectual development relative to reasoning, thinking and coping.
- FFA.CS-M.Communication: Effectively interact with others in personal and professional settings.

- FFA.CS-N.Decision Making: Analyze a situation and execute an appropriate course of action.

Common Career Technical Core

- AG2: Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role of agriculture, food and natural resources (AFNR) in society and the economy.
- AG5: Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.

NASDCTEc

- AGC09.02: Select, research and examine critical aspects of career opportunities in one or more AFNR career pathways in order to gain an understanding of the breadth of occupations within this cluster.

Common Core–Speaking and Listening

- CCSS.ELA-Literacy.SL.9-10.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-Literacy.SL.9-10.2: Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

Common Core–Math Practices

- CCSS.MP5: Use appropriate tools strategically.
- CCSS.MP6: Attend to precision.

AFNR Career Ready Practices

- CRP.02. Apply appropriate academic and technical skills. Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive.
- CRP.04. Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.

Partnership for 21st Century Skills

- Communication
- Leadership and Responsibility
- Initiative and Self-direction

LESSON PLAN:

1. ***Bell Ringer:*** Hold a question-and-answer session with students to help them gauge elements to consider when thinking about a career in the animal industry. This can be done via the PowerPoint created to accompany this lesson or using a resource like www.polleverywhere.com where students can respond via text message and results can be projected on the screen. Example questions include:
 - a. *As we consider careers in animal agriculture, what kind of animals would you prefer to work with or learn about?* (Small animals, large animals, pets, livestock, wild animals, aquatic animals, etc.)
 - b. *What area(s) interests you the most about animals?* (Research, medicine/health, conservation, teaching/education, food production, recreation, working with sick vs. healthy animals, etc.)
 - c. *What types of settings are appealing to work in?* (Farm, laboratory, business/office, classroom, nature/conservation, clinic/doctor, etc.)
 - d. *How much direct contact would you like to have with animals while working with them?* (Directly, every day; occasionally, but not every day; no direct contact; I'm flexible or have no preference; etc.)
 - e. *How much education do you want/plan to pursue?* (Employment after high school; associate degree; bachelor's degree; graduate degree; DVM, etc.)
 - f. *Which of these qualities and/or skills describe you?* (Adaptable, effective communicator, good with people, scientific, observant, problem solver, inquisitive/knowledge seeker, calm under pressure, compassionate, leader)
2. ***Introduction:*** Have students (either individually, in pairs, in groups, or as a class) explore the Prezi found [HERE](#). This Prezi provides an overview of careers in the animal industry. Students should use the worksheet "Introduction to Careers in the Animal Industry" to capture notes and questions about these careers.
3. ***Activity 1:*** As a class, view the beginning of the Chapter 2 video (stop at timestamp 4:15) in the STEM Careers Improving Animal Health virtual field trip to Zoetis available under educator resources on AgExplorer. The direct url is <https://agexplorer.ffa.org/virtual-field-trips/stem-careers-improving-animal-health/>. Use the worksheet "Animal Careers: A Closer Look" to answer the prompts during the video segment. If time allows, have students share their responses to the video prompts either with a partner or in groups.
4. ***Activity 2:*** Provide students with the opportunity to work individually or in pairs to explore the animal systems

career focus area on AgExplorer (<https://agexplorer.ffa.org/focus/animal-systems>). Students can look for answers to the questions they identified in the video, explore specific career interests, and discover skills required for careers with animals. Students should continue to use the “Animal Careers: A Closer Look” worksheet to capture information about the website.

5. *Follow-up:* After completing Activity 2, have students share any insight and new information they learned about careers in the animal industry and the necessary skills needed to be successful in those careers.
6. *Leveling Up:*
 - a. Have students do a report on one specific career in the animal industry that interests them. This could include information on education requirements, skills needed, job outlook, and salary projection.
 - b. Invite a panel of three to five speakers with a diverse variety of jobs in the animal industry (Examples: production, products, pharma, sales, feed sales, etc.) to speak to the class.
7. *Exit Ticket:* Have students answer the bell ringer questions again, but this time on the “Now That I’ve Thought About It ...” worksheet. Two additional prompts, beyond those for the bell ringer, are included.

NAME: _____

Aligned to the following standards:
CS.02; CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M;
FFA.CS-N; AG2; AG5; AGC09.02; CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2; MP5; MP6;
CRP.02; CRP.04;

Introduction to Careers in the Animal Industry

DIRECTIONS:

Explore the Prezi, and capture notes from your discoveries in the space provided.

Type of Career	Description of Career	Questions I Have

NAME: _____

Aligned to the following standards:

CS.02; CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M;
FFA.CS-N; AG2; AG5; AGC09.02; CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2; MP5; MP6;
CRP.02; CRP.04

Animal Careers: A Closer Look

DIRECTIONS:

Watch Chapter 2 (until timestamp 4:15) of the video "STEM Careers Improving Animal Health," available at <https://agexplorer.ffa.org/virtual-field-trips/stem-careers-improving-animal-health/>. Record your notes below.

Animal careers I heard about
or saw in the video.

Questions I would ask Dr. Sanders or someone in an
animal career.

DIRECTIONS:

Locate the homepage of the AgExplorer website, <https://agexplorer.ffa.org/>. Click through the animal systems career focus area. Some answers to your questions above may be located on these pages. Record your notes below.

Animal careers I discovered that I
didn't know about previously.

More questions and answers I found while discovering
animal systems careers.

The career(s) with animals that I'm most interested in and the related skills I have.

NAME: _____

Aligned to the following standards:

CS.02; CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M;
FFA.CS-N; AG2; AG5; AGC09.02; CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2; MP5; MP6;
CRP.02; CRP.04

Now That I've Thought About It ...

DIRECTIONS:

Consider the questions from the beginning of the lesson. Have your answers changed now that you have more information about careers with animals? Do you have more questions? Work through the statements below and provide your responses.

What kind of animals would you prefer to work with? Check all that apply. Have your thoughts changed?

- ☐ Small animals
- ☐ Large animals
- ☐ Pets
- ☐ Livestock
- ☐ Wild animals
- ☐ Aquatic animals
- ☐ Exotic animals

What areas interest you the most about them? Have your thoughts changed?

- ☐ Research
- ☐ Medicine/Health
- ☐ Conservation
- ☐ Agriculture business/sales
- ☐ Teaching/Education
- ☐ Food production
- ☐ Recreation
- ☐ Products

What types of settings are appealing to work in? Have your thoughts changed?

- ☐ Farm
- ☐ Laboratory
- ☐ Business/Office
- ☐ Classroom
- ☐ Nature/Conservation
- ☐ Clinic/Doctor

Think about location. Where do you want to work?

- ☐ Your home town
- ☐ Travel within your state daily
- ☐ Travel to other states
- ☐ Travel to other countries
- ☐ Move to another state
- ☐ Move to another country

How much direct contact would you like to have with animals while working with them? Have your thoughts changed?

- ☐ Direct, every day
- ☐ Occasionally, but not every day
- ☐ No direct contact
- ☐ I'm flexible or have no preference

How much education do you want/plan to pursue? Have your thoughts changed?

- ☐ Employment after high school
- ☐ Doctor of Veterinary medicine (DVM)
- ☐ Associate degree
- ☐ Bachelor's degree
- ☐ Graduate degree

List necessary skills for a career in the animal industry.

NAME: _____

KEY — Introduction to Careers in the Animal Industry

DIRECTIONS:

Explore the Prezi, and capture notes from your discoveries in the space provided. **Answers may vary.**

Type of Career	Description of Career	Questions I Have
Animal Production	Leadership and management of any enterprise that deals with the daily production and care of animals (beef, dairy, swine, poultry, goats, sheep) Work directly with animals, supervise people, good oral communication and problem-solving skills	Answers will vary.
Animal Processing	Focus on quality animal products and a processing industry that provides safe, healthful food and by-products Find solutions, work with consumers or consumer-driven food industries, create quality, safe animal products	Answers will vary.
Quality Control/Inspectors	Graders and inspectors at a farm or manufacturing location for milk, meat and eggs	Answers will vary.
Processing Industries and Companies	Product development managers and sales positions in milk, egg or meat processing industries	Answers will vary.
Live-Animal Procurement and Breeding Management	Livestock buyers and seedstock animal production evaluators and breeders	Answers will vary.
Researchers (Processing)	University or industry-needs researchers with focus on animal processing and products	Answers will vary.
Animal Research Lab Techs	Conducting or assisting scientists with research about animals and any aspect dealing with animals	Answers will vary.
Animal Agribusiness	Those interested in the business aspects of the animal industry. Knowledge will need to be gained in accounting, sales and marketing and business management along with general animal knowledge.	Answers will vary.

NAME: _____

KEY — Animal Careers: A Closer Look

DIRECTIONS:

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Animal careers I heard about or saw in the video.

Answers will vary but could include:
Quality control, animal scientist,
researcher, production assistant,
business/industry, animal caretaker,
veterinarian, lab technician, farmer,
product developer

Questions I would ask Dr. Sanders or someone in an animal career.

Answers will vary

DIRECTIONS:

Locate the homepage of the AgExplorer website, [AgExplorer.com](https://agexplorer.ffa.org). Click through the animal systems career focus area. Some answers to your questions above may be located on these pages. Record your notes below.

Animal careers I discovered that I didn't know about previously.

Answers will vary.

More questions and answers I found while discovering animal systems careers.

Answers will vary.

The career(s) with animals that I'm most interested in and the related skills I have.

Answers will vary.