

## FUN FACES OF WISCONSIN AGRICULTURE CAREER GUIDE



### **Activity Length:**

Exploring Agricultural Careers – each worksheet will take 30 minutes  
Career Ag Mag Activity- 45 minutes

### **Student Objectives:**

- Explore agricultural careers
- Identify skills needed to perform the job tasks
- Self-evaluation of interests, skills and educational strengths
- Identify educational requirement for various careers

### **Wisconsin Model Academic Standards:**

English	A.4.1	A.4.4	C.4.1	C.4.2	D.4.1	E.4.1
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### **Note:**

This lesson plan can be targeted to a specific commodity or agricultural resource (i.e. pork related careers, natural resources related careers). You can also make the lesson correspond to one of the other Fun Faces lesson topics (i.e. Christmas Trees, strawberries, potatoes).

### **Materials for this activity:**

- Internet Access
- CSREES Living Science Career Flyers – available in hard copy or download from ([www.agriculture.purdue.edu/USDA/careers/index.html](http://www.agriculture.purdue.edu/USDA/careers/index.html))
- What Do They Do?
- What Can I Do?
- Agricultural Career Descriptions
- *Career Ag Mag* – available from ([www.wisagclassroom.org](http://www.wisagclassroom.org))
- Poster board or card stock and markers
- Scissors
- Brad or paper fastener

### **Lesson Outline:**

#### **Exploring Agricultural Careers**

1. Using the website links listed below, explore different websites that explain agricultural careers.
  - [http://www.ffa.org/index.cfm?method=c\\_job.CareerSearch](http://www.ffa.org/index.cfm?method=c_job.CareerSearch)—A very detailed search engine with many different agriculture careers in addition to the ones listed on the previous page. Give you specific answers to many of these questions about each of the careers

- <http://www.wisconsin.edu> –The broad website of the entire UW public college and university system
- <http://www.wisconsin.edu/campuses/index.htm> --A map of the colleges and universities in the UW System. There are also links to those specific school's websites
- <http://apps9.uwex.edu/pls/uwhelp/MajorMania> --a search engine that tells you which UW schools will have the programs you are looking for
- <http://www.ageducate.org/careers/> --American Farm Bureau Foundation for Agriculture, many links from this site to different resources about agricultural careers
- <http://www.agday.org/tc/tc-career.html> -- National Ag Day website career information
- <http://wipapercouncil.org/careers.htm> -- Wisconsin Paper Council Career information
- <http://www.realtrees4kids.org/ninetwelve/jobs.htm> -- National Christmas Tree Grower's Career information
- <http://www.asa-cssa-sssa.org/career/index.html> -- Soil Science Society of America Career information
- [www.agriculture.purdue.edu/USDA/careers/index.html](http://www.agriculture.purdue.edu/USDA/careers/index.html) -- USDA Living Science Careers information

2. Review the Agricultural Careers Descriptions worksheet.
3. Have the students complete What Do They Do worksheet.
4. After they have learned about various agricultural careers, have the students complete What Can I Do?

### Career Ag Mag Activity

1. Obtain classroom copies of *Career Ag Mags* from ([www.wisagclassroom.org](http://www.wisagclassroom.org))
2. Assign one-two students (depending on your class size) to each section/article of the *Career Ag Mag* except for The Dairy Shoppe and How Many Hats Does a Farmer Wear.
3. The students should read their assigned section and prepare a one-minute report on it. They can include what they learned, new terms, and other facts they found interesting.
4. Complete The Dairy Shoppe as a class. Each student should complete a poster.
5. Students should cut out the two wheels in the How Many Hats Does a Farmer Wear section. Fasten the two with a brad (paper fastener) and follow the instructions for using the wheel.

### Suggested Reading Materials:

- *Ten Things Kids Want to Know About Farming* video- available from ([www.wisagclassroom.org](http://www.wisagclassroom.org))
- *Century Farm*. By Cris Peterson, Boyds Mill Press, 1999.

**Related activities:**

- Students can bring in clothing or items used by various careers. The class can have a “fashion show” of agricultural careers.
- Students can bring in a baseball style cap. Each student fills out an index card with the name of the career or skill that a producer must have to be successful and pins it to the cap. One student sits on a chair and the other students place a cap on top of the students head. As they put the cap on, they must explain what skills are involved in that career.
- Students can interview people in various agricultural careers.
- Students can organize a Career Day in which they invite adults to talk about their careers. Students could rotate to various presentations or the adults could be part of a panel discussion.
- Students interview their parents and grandparents to find out about their careers. Are they working in agricultural related careers?

## FUN FACES OF WISCONSIN AGRICULTURE AGRICULTURAL CAREERS DESCRIPTIONS



Below are brief descriptions for the careers on the student's worksheet, What Do They Do? Before having students complete the worksheet, go through the different careers with the students and discuss what some of the job responsibilities may be for each of them.

- **Plant Scientist (Agronomist)**—can work out in the field doing research or work in a lab conducting experiments. They are responsible for developing new varieties of crops and making crops more efficient to grow.
- **Flower Scientist (Horticulturist)**—can work outside, in a greenhouse, or in a lab to improve and develop new varieties of flowers, trees and vegetables.
- **Soil Scientist**—studies the different soil types and learns what types of soil best grow which specific crop. A soil scientist understands and enjoys working with chemistry. They also know the importance of soil conservation and the impact erosion has on soil.
- **Animal Scientist**—studies animal behaviors and habits and knows animals from the inside out. An animal scientist may work in a lab, on a farm, or at a university. They can specialize on one specific animal or work with a variety of animals. They may research ways to help animals grow faster or be healthier.
- **Food Scientist**—Works to discover and develop new ways to grow food and new varieties of food that provide more nutrients in the same serving. They are also responsible for developing new food products and different combinations and flavors for food. Ensuring a safe and healthy food supply is important to them.
- **Greenhouse Owner or worker**—operates and maintains a store of growing plants for the public to buy. They must understand which plants require light or shade conditions, what to do to treat plant disease, be able to work with people, and have a business understanding to be profitable.
- **Orchard grower**—plants and cares for trees in a fruit orchard. They need to be able to manage people to pick their fruit or work with customers that want to come and pick their own. A good understanding of disease and fruit production helps to make this job easier.

- **Pesticide applicator**—be willing to drive machinery and sometimes airplanes to apply products to fields to decrease pests and help plants grow better. This person must understand the relationship between plants and insects, be able to follow clear directions, and enjoy working with people.
- **Animal Nutritionist**—studies and knows the nutritional needs that animals have. They must understand which feeds provide which nutrients and how too much or too little of each nutrient can make an animal sick or cause certain disorders. A nutritionist often works with computers to develop rations for the farmers, and also works with feed mills and the farmer to make sure that the animals are as healthy as possible.
- **Animal Geneticist**—works with the genetic make-up of animals to discover which genes are responsible for disease, high production, or many other factors. A geneticist may sometimes work in the field, but is often in the lab. They are also responsible for developing new technologies to help animals produce high quality animals.
- **Sales person**—is responsible for selling items to farmers and agricultural businesses. May sell products, feed, animals, machinery, or any other agriculture related item. A sales person must be good at working with people and knowledgeable about whatever they might be selling. This often includes continued learning when new products are developed.
- **Mechanic**—fixes machinery, computer equipment, feeding equipment...that is used in the agricultural industry. They must have a broad knowledge of how things work and the safest way to fix them. Sometimes may work in a shop, or may work at various locations on calls to farms.
- **Heavy Equipment operator**—understands the importance of safety and knows how to operate many different machines and tractors. Is able to work in different conditions and understands the best way to operate each machine to get the best production. This person may work on a farm or may work at a building site.
- **Professor of plant or animal science**—Teaches students in universities or colleges about their specific area. Have completed substantial research about a specific topic and are able to teach a variety of classes. May also teach lab sections which requires students to work hands on with the plant or animals that are being taught about.
- **Agriculture Teacher**—Educates students about agriculture and the different careers in the agriculture fields. Encourages students to try new things and helps them to find the opportunities to explore their careers before graduating from high school. Takes students on field trips and contests to help them see the different areas of agriculture.

- **Environmental Relations person**—has a good understanding of environmental policies and is able to advise farmers on how to meet the environmental policies the best and is also able to help farmers be more productive while also getting the most out of the environment.
- **Soil Conservationist**—knows the importance of soil care and conservation. They may take samples in the field or run lab tests to see the quality of soil. They work with people to plan and attend workshops about how to properly care for the soil.
- **Store manager or owner**—owns, runs, or works in a store that sells agriculture products to or for farmers. They are able to work with people and understand the needs of their customers. They also have a good understanding of economics and can price items to make a profit while also being sold at a competitive price.
- **Veterinarian**—understands the way that animals work on the inside so that they can diagnose health problems and help farmers to be profitable. They are also able to help check health and perform surgeries when necessary. A veterinarian has to be able to work with people and animals while also being able to learn new techniques and enjoy learning.
- **Truck Driver**—is responsible for transporting products to processing facilities, to stores, or to farms. Understands the importance of safe driving and machinery operation, is able to meet guidelines for the loads they carry and meet deadlines for loads.
- **Advertising/Marketing**—helps to sell products and ideas by knowing how to effectively use color, words, and phrases to tell the strengths of what is being marketed. This person works with computers to create advertisements, and works with people to find the need for advertising and marketing. They have to be a creative thinker to meet the demands of a competitive market and get their idea out before others do.
- **Food Plant worker**—knows and follows the policies set forth by the United States Department of Agriculture to produce safe and quality foods. They are responsible for food changing from raw to processed form. This is often a job that occurs inside and sometimes with the use of computers or machinery.
- **Inspector**—knows and enforces the government policies for food and animal production sites. Must be able to work with people and be willing to travel to conduct inspections.

- **Dairy Farmer**—understands the needs of dairy cows and is able to work with nutritionists, sales people, genetics companies, crop growers, veterinarians, and the public to meet those needs and find a market for the finished product. A dairy farmer also needs to understand the environmental regulations and abide by them.
- **Beef Farmer**—understand the needs of beef or pork animals and provide an environment that allows them to grow and stay healthy as possible. Must also be able to work with people in feed, sales, veterinarian, and purchasing roles.
- **Crop Farmer**—know how to efficiently grow each specific crop and understand the importance of crop rotation and soil type for each specific crop. Also be able to work with farmers and feed companies to effectively market their crop and get the best price.
- **Vegetable or Fruit Farmer**—knows the important climate, soil, and nutrient requirements to grow your specific fruit or vegetable. Is able to work with sales people, service people, and the public to grow and market your crop.
- **Agricultural Broadcaster (TV or radio)**—serves as a ‘voice for agriculture’ over TV or the radio to talk about important farm issues, answer questions, inform the public of agricultural happenings and events, and interview experts in these areas.
- **Agricultural Journalist**—interviews and researches topics to write stories for news papers, radio, or TV to inform people about agricultural news and events. This person must have good writing skills, like to work with people, and have an ability to work with different computer programs to publish their work.

## FUN FACES OF WISCONSIN AGRICULTURE WHAT DO THEY DO?



1. Review and refer to the worksheet, [Agricultural Careers Descriptions](#), or to what information you found on the website.
2. Put the careers from below onto the lines next to the words that describe them (they can be used more than once).

Plant Scientist (Agronomist)  
Flower Scientist (Horticulturist)  
Soil Scientist  
Animal Scientist  
Food Scientist  
Greenhouse Owner  
Greenhouse worker  
Orchard grower  
Pesticide applicator  
Animal Nutritionist  
Animal Geneticist  
Sales person  
Mechanic  
Heavy Equipment operator  
Professor of plant or animal science  
Agriculture Teacher

Environmental Relations person  
Soil Conservationist  
Store manager or owner  
Veterinarian  
Truck Driver  
Advertising/Marketing  
Food Plant worker  
Inspector  
Dairy Farmer  
Beef Farmer  
Pork Farmer  
Vegetable Farmer  
Agricultural Broadcaster (TV or radio)  
Agricultural Journalist

Work Outside \_\_\_\_\_

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Work in a scientific lab \_\_\_\_\_

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Work with people \_\_\_\_\_

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Work with animals \_\_\_\_\_

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Work with plants \_\_\_\_\_

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Operate Machinery \_\_\_\_\_

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Work with computers \_\_\_\_\_

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# FUN FACES OF WISCONSIN AGRICULTURE

## WHAT CAN I DO?



1. Using the worksheet What do they do?, place a check in the box next to the three phrases that best describe your interests
2. Circle any of the careers that are listed on all three lines that you checked. These careers should match all three of your interests.
3. Complete the questions below:

Write on the line the career you think is the best fit for you:

Career: \_\_\_\_\_

What kind of clubs or organizations can I join now to prepare for a career in this area?

\_\_\_\_\_

What kind of jobs could I do before I graduate from high school that will prepare me for a job like this?

\_\_\_\_\_

\_\_\_\_\_

Do I know anyone who has this career? \_\_\_\_\_

If so, who is that person? If not, where would I find someone who has this kind of career to job shadow?

\_\_\_\_\_

\_\_\_\_\_

What skills or knowledge should I have to hold this career? \_\_\_\_\_

\_\_\_\_\_

Do I need a college education or any special training for this career? \_\_\_\_\_

\_\_\_\_\_

What colleges, universities or technical schools could I attend in Wisconsin to study for this career?

\_\_\_\_\_

An average day for someone with this career looks like: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How much money does a person with this kind of career make each year? \_\_\_\_\_

What other things about this career make it something that is a good fit for me? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_