



Spring/Summer 2024 Teaching Guide

In this guide, you will find activities for six articles in the spring/summer 2024 issue of FFA New Horizons. Worksheet answer keys can be found at the end of the activity worksheet. The activities are aligned to educational standards. (See each activity for the specific standards.)

VOCABULARY ACTIVITY

New Horizons Vocabulary

Use [Appendix 7](#) and the list of vocabulary words to choose ten words to create a short story. After completing the story, choose one vocabulary word to illustrate.



TRY SOMETHING NEW WITH YOUR SAE

Don't be afraid to go against the grain and explore your unique agricultural interests.

[Appendix 1: Try Something New With Your SAE](#)



FOR THE LOVE OF LIVESTOCK

Sonoma FFA alumnus discovered possessing a passion for animals and a willingness to learn was the key to gaining new experiences.

[Appendix 4: For the Love of Livestock](#)



PAVING A PATH FORWARD

Corey Flournoy, an FFA alumnus and former National FFA president, maintains a commitment to cultivating a culture of belonging.

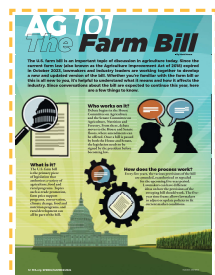
[Appendix 2: Paving a Path Forward](#)



WIRED FOR GROWTH

This North Clackamas FFA member developed a creative, high-tech solution to produce more feed for the campus farm.

[Appendix 5: Wired for Growth](#)



AG101: THE FARM BILL

The U.S. farm bill is an important topic of discussion in agriculture today.

[Appendix 3: Ag101: The Farm Bill](#)



HANDS-ON EDUCATION

Bristol County Agricultural High School students prepare for career success by learning to do and doing to learn every day.

[Appendix 6: Hands-On Education](#)

[CLICK HERE TO DOWNLOAD THE GOOGLE WORKSHEETS.](#)





NEW HORIZONS

Spring/Summer 2024 TEACHING GUIDE



ARTICLE SUMMARY

TRY SOMETHING NEW WITH YOUR SAE

Don't be afraid to go against the grain and explore your unique agricultural interests.

Bell Ringer

When you read the words “agricultural communications,” what comes to mind?

Discussion Questions:

1. What is agricultural communications?
2. Why is agricultural communications important?
3. Do you listen to, watch or follow any agriculture-based communications accounts? If yes, who?

Activity:

Part 1: After completing and discussing the bell ringer, have students read the article “Try Something New With Your SAE” in the spring/summer 2024 issue of FFA New Horizons and complete the Part 1 activity.

Part 2: Part 2 of the worksheet is a brand marketing guide students will use to develop their brands for their agricultural communications SAEs.

Part 3: After students develop their brands, they can start to brainstorm their ideas for their agricultural communications SAE. Option A is for students interested in projects consisting of podcasts, YouTube channels or vlogs. Option B is for students interested in social media or photography. Option C is for students interested in journalism or news reports.

FFA Tip:

Have chapter officers and members create a chapter newsletter or social media account. Officers and members can take concepts from this activity to aid them in their process of brainstorming.

SAE Tip:

Have members read through the agricultural proficiency award area descriptions. Then ask them to list all the different SAEs they can come up with that would fit in three or four selected areas. Hundreds of different SAE ideas can be developed from simply reading and using these descriptions as idea generators.

VOCABULARY

Agricultural Communications
Brand
Podcast

EXIT TICKET

How does agricultural communications impact the agriculture community?

CAREER FOCUS AREA

Any; Agricultural Communications

RESOURCE HIGHLIGHT

Fall 2021 Appendix 2: Arts and Culture in Agriculture, <https://ffa.box.com/s/djjazbflndi8c-083d1399xnp4kkkvtx7>

Spring 2021 Appendix 6: Media Center, <https://ffa.box.com/s/i2xdkgti4akg5531jpf5utn2w4lpl25r>

Current Event Worksheet: Give Me More
<https://ffa.box.com/s/xkrrxdmlllys6w95bc7s-26fe5egvalq8c>

APPENDIX

Appendix 1: Try Something New With Your SAE

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.01, FFA PRECEPTS: FFA-PL-A, FFA-PL-E, FFA-CS-M, FFA-PL-F, FFA-PG-I, COMMON CORE – READING: INFORMATIONAL TEXT, COMMON CORE-LITERACY IN SCIENCE & TECHNICAL SUBJECTS: WRITING: CCSS.ELA-WHST.9-16, COMMON CORE-SCIENCE & TECHNICAL SUBJECTS, COMMON CORE – MATH PRACTICES, COMMON CORE – WRITING: CCSS.ELA-W.9-10.2, COMMON CORE – SPEAKING AND LISTENING: CCSS.ELA-SL.9-10.2, CCSS.ELA-SL.9-10.4, COMMON CORE LANGUAGE, COMMON CAREER TECHNICAL CORE: AGI, AFNR CAREER READY PRACTICES: CRP.02, CRP.04, CPR.07, CPR.11, NASDCTEC-STATE DIRECTORS (CAREER CLUSTERS), P21 SKILLS: TECHNOLOGY LITERACY; THINK CREATIVELY; COMMUNICATION; INITIATIVE AND SELF-DIRECTION

Quiz:

Blue Jackets to Big Stages

– By Jessica Mozo

FFA members tend to reach for the stars, and sometimes they land among them. See if you can match descriptions of these former members who are now professionals excelling in their respective fields.

1. This Grammy Award-winning singer spent her childhood on her family's Christmas tree farm in Pennsylvania. She started writing songs professionally when she was 14 – about the same time she was a Hendersonville FFA member in Tennessee.

2. Before this quarterback was selected in the 2018 National Football League draft, he worked on his family's farm in California. As a Firebaugh FFA member, he was a national proficiency finalist and American FFA Degree recipient. His FFA jacket was displayed during the 95th National FFA Convention & Expo.

3. This country music singer was an FFA member in Start, La., before he became one of the best-selling musical artists of all time, selling more than 90 million records.

4. This former U.S. president was an FFA member in Plains, Ga., in the

1930s, where he was raised on a peanut farm.

5. Before becoming a singer and songwriter, this FFA alumnus was once a professional bull rider and worked in a Texas prison. His boss, the prison warden, encouraged him to quit and pursue a career in country music.

6. Throughout his 60-year career as a radio broadcaster, this journalist helped millions of listeners understand the importance of agriculture. He grew up milking cows in Wisconsin, and later became the best-known broadcaster in the U.S.

Famous FFA Alumni

Here's a full list of former FFA members who became prominent figures in agriculture, entertainment, government, sports and other industries.



Answers: 1. Taylor Swift 2. Josh Allen 3. Tim McGraw 4. Jimmy Carter 5. Cody Johnson 6. Orion Samuelson

Sources: RFD-TV and Indy Star Photography: Getty Images, MirageC, EyeEm; Courtesy of Kaitlyn Baker

Try Something New With Your SAE

Don't be afraid to go against the grain and explore your unique agricultural interests.

– By Courtney Leeper Girgis

Many of Kaitlyn Baker's friends in the Frederick FFA Chapter in Frederick, Md., raise livestock as part of their supervised agricultural experiences (SAEs). While Baker enjoys animals, she wanted to do something different.

Reflecting on her freshman experiences in FFA, the sophomore decided she wanted to be a guiding voice to members trying to find their place in the organization. So Baker started an agricultural communications SAE.

FFA With Kay began with a Google document of ideas, an Instagram account and the encouragement of her FFA advisor, Richard Stonebraker. Baker began making videos in which she talked to the camera.

"But it didn't feel right," she says. "So I tried something new."

Noticing her mom had recently started listening to podcasts, Baker decided to try an audio format. She created a podcast on Spotify that can be found by searching "FFA.With.Kay." Baker uses the same username on Instagram.

Through "FFA With Kay," Baker answers questions she had as a first year FFA member, such as:

- **What's the organization all about?**
- **What's a Program of Activities?**
- **How do you wear official dress, and in what order do the pins go on your FFA jacket?**

For members who are thinking about trying a different kind of SAE, Baker's advice is to do your research and stay optimistic. Four months into her project, she is full of ideas for future podcast episodes and working to ramp up production while balancing school and other FFA-related responsibilities.



Frederick FFA member Kaitlyn Baker's SAE includes producing a podcast called FFA With Kay.

TAKE THE NEXT STEP

Are you ready to dive deeper into learning about a different aspect of agriculture? You can find more information and inspiration for starting a new SAE or diversifying the one you have already built by visiting

FFA.org/FFA-Video-Center/SAE-For-All.



Name: _____

Appendix 1: Try Something New With Your SAE

Part 1

Directions:

Read the article “Try Something New With Your SAE” in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. Color the state where the Frederick FFA Chapter is located.



2. What type of SAE did Kaitlyn Baker have?
3. FFA With Kay began with a _____, an _____ and the encouragement of her _____, Richard Stonebraker.
4. What is the title of Baker's podcast?
5. What were the three questions Baker answers in her podcasts?
 -
 -
 -
6. How can you add an agricultural communications component to your SAE?



Name: _____

Part 2

Directions:

Before creating any agricultural communications platform, you need to develop a brand. A brand is used to separate your organization from others. Use this worksheet as a guide to create your marketing brand.

1. What platform are you going to create? (Ex. podcast, YouTube channel, social media page, news, journal article)

2. Which audiences are you primarily targeting? In other words, which audiences do you want to build a relationship with?

3. Define your brand: What is your mission or the values you want to communicate? What is your goal or vision for your brand?
 - a. Mission/Values: (a brief, broad statement about an organization's goals and how it intends to meet those goals)

 - b. Vision: (describes where an organization is going and what it will look like when it gets there)

4. Develop visual brand consistency. (Brand consistency ensures the way you present your organization and what it stands for remains the same across all your marketing platforms.)
 - a. Fonts:

 - b. Branding colors:

 - c. Logo drafts:

Name: _____

Part 3

Directions:

After completing Part 2, think about how you could do an agricultural communications SAE. If you choose to do a podcast or YouTube channel, complete Option A. If you choose to do a social media account, complete Option B. If you choose to do a news or journal article, complete Option C.

Option A: Episode Pitch

1. Proposed Episode Title:

Overview

Provide a 100- to 300-word summary of your episode idea. In doing so, answer the following questions:

-What is the topic/theme of your episode?

-If your episode has subthemes or topics, list those.

-Who is your target audience?

-Why are they going to be interested in this topic?

-How will these episodes keep people engaged?

Name: _____

Format

Provide an overview of the format of your proposed episode.

-Does your episode have a set structure? If so, what will that be?

-Will your episode include additional guests? If so, who and why?

-Will your episode include additional audio (music/effects)? If so, why?

Research Learning Examples

Provide links to three podcasts or YouTube episodes that you can use as examples to learn from. For each example episode, provide a short (less than 100 words) statement as to why that example episode will help you construct your own episode. These episodes should have some elements of style or format that you wish to incorporate in your own episode.

Name: _____

Option B: Social Media Pitch

1. Proposed Social Media Name:

Overview

Provide a 100- to 300-word summary of your social media idea. In doing so, answer the following questions:

-What is the topic/theme of your account and posts?

-If your account has subthemes or topics, list those.

-Who is your target audience?

-Why are they going to be interested in this topic?

-How will these posts keep people engaged?

Name: _____

Creation of social media posts with explanations.

Provide an overview of the first three posts on your proposed social media account.

- *Using a design platform (Canva, Google Slides, PowerPoint, etc.), create the graphics you will use for your social media posts.*
- *In the space provided below, please include the graphics, the content and the purpose of each post.*

Research Learning Examples

Provide links to three social media accounts that you can use as examples to learn from. For each example, provide a short (less than 100 words) statement as to why that account will help you construct your own posts. These accounts should have some elements of style or format that you wish to incorporate in your own account.

Name: _____

Option C: Article Pitch

1. Article Title:

Overview

Provide a 100- to 300-word summary of your article. In doing so, answer the following questions:

-What is a current event in the agriculture industry?

-Who is your target audience?

-Why are they going to be interested in this topic?

-How will these articles keep people engaged?

Name: _____

Format

Provide an overview of the format of your article.

-Introduction:

-Body:

1.

2.

3.

-Conclusion:

Name: _____

Research Learning Examples

Provide links to three journal or news articles that you can use as examples to learn from. For each article, provide a short (less than 100 words) statement as to why that example will help you construct your own article.



NEW HORIZONS

Spring/Summer 2024 TEACHING GUIDE



ARTICLE SUMMARY

PAVING A PATH FORWARD

Corey Flournoy, an FFA alumnus and former National FFA president, maintains a commitment to cultivating a culture of belonging.

Bell Ringer

In your own words, define equity, diversity and inclusion.

Discussion Questions:

1. Why is equity important?
2. Why is diversity important?
3. Why is inclusion important?

Activity:

Part 1: Have students read the article "Paving a Path Forward" in the spring/summer 2024 issue of FFA New Horizons and complete the questions.

Part 2: Diversity includes a range of people from various backgrounds. After completing Part 1, have students create a list of characteristics that make them who they are. (Ex. age, education, ethnicity and national origin, gender and gender identity, lifestyles, experiences, etc.)

Teacher note: You will need sticky notes.

Part 3: Have students choose a word related to equity, diversity and inclusion from the word bank. Once a word is selected, students will use it to write an acrostic poem. Students create an acrostic poem by writing their selected word vertically in the area provided. They will need to generate a short phrase or sentence that begins with each letter of the vertical word. This phrase or sentence should be related to the word they selected.

FFA Tip:

Have students check out the commitment to FFA For All, [FFA.org/ffa-for-all/](https://ffa.org/ffa-for-all/), to learn more about equity, diversity and inclusion.

SAE Tip:

Explore niche markets in your area. What SAEs could be developed by students engaging with people of other backgrounds? Raising younger/older, lighter/heavier or different species of meat animals for specific cultural tastes or celebrations, raising or handling food in specific ways to meet specific cultural preferences or standards and designing agricultural curriculum or communications to reach different groups are all great SAE opportunities to make connections with others.

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.02, FFA PRECEPTS: FFA-PL-A, FFAA-PL-E, FFA-CS-M, COMMON CORE – READING: INFORMATIONAL TEXT, COMMON CORE-LITERACY IN SCIENCE & TECHNICAL SUBJECTS: WRITING: CCSS.ELA-WHST.9-10.4, COMMON CORE-SCIENCE & TECHNICAL SUBJECTS, COMMON CORE – MATH PRACTICES, COMMON CORE – WRITING: CCSS.ELA-W.9-10.2, COMMON CORE - SPEAKING AND LISTENING: CCSS.ELA-SL.9-10.1, COMMON CORE LANGUAGE, COMMON CAREER TECHNICAL CORE, AFNR CAREER READY PRACTICES: CRP.02, CRP.04, CRP.05, NASDCTEC-STATE DIRECTORS (CAREER CLUSTERS), P21 SKILLS: COMMUNICATION; THINK CREATIVELY; FLEXIBILITY AND ADAPTABILITY; INITIATIVE AND SELF-DIRECTION; SOCIAL AND CROSS-CULTURAL

VOCABULARY

Diversity
Equity
Inclusion

EXIT TICKET

How can you be more inclusive?

CAREER FOCUS AREA

Any

RESOURCE HIGHLIGHT

LifeKnowledge: Appreciating Cultural Diversity
<https://ffa.box.com/s/2lynxbwkk10fyqh4rd9i-wuatuykskalw>

Today's Challenges; Today's Leaders-Diversity
<https://ffa.box.com/s/p64ghcjy3bvkd3ovg-byv15q5ht1q5do>

APPENDIX

Appendix 2: Paving a Path Forward

Paving a Path FORWARD

Corey Flournoy, an FFA alumnus and former National FFA president, maintains a commitment to cultivating a culture of belonging. - By Jessica Walker Boehm

Although Corey Flournoy's role as the executive in residence for equity, diversity and inclusion for the National FFA Organization is fairly new, he's no stranger to FFA — nor to trailblazing.

Flournoy, a Chicago, Ill., native, became the first African-American National FFA president in 1994. He didn't realize it at the time, but he says this position changed the course of his life.

"During my year of service, I learned the importance of building meaningful relationships as I met people from across the U.S.," Flournoy says. "I started to understand that when you get to know someone beyond the surface, you develop empathy, and that's when real conversations and connections can begin."

Empathy became a cornerstone of Flournoy's professional career. In 1996, he co-founded the company he still operates today, Creative Outreach Consulting. Through this company, he delivers a 360-degree holistic approach to individual and organizational transformative change through proven practices; programs and processes in leadership development; personal coaching; and diversity, equity and inclusion.

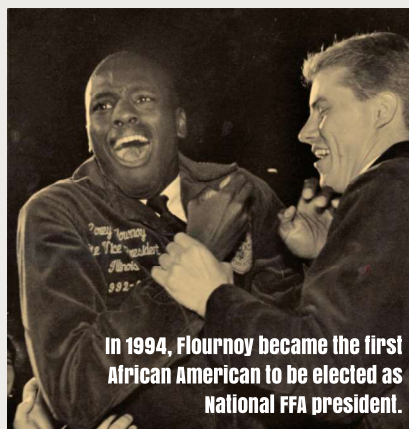
A PLACE TO BELONG

When National FFA Organization CEO Scott Stump asked him to take on a similar role within FFA in 2023, Flournoy knew it was a perfect fit.

"My ultimate goal is to help ensure all students in FFA feel welcomed, no matter who they are, where they come from or how they identify," says



Flournoy brought a message of inclusivity to the 96th National FFA convention & Expo.



In 1994, Flournoy became the first African American to be elected as National FFA president.

Flournoy, who also served as vice president of people and culture development at Aurora, a self-driving start-up, and was Groupon's first global head of inclusion and diversity. "If we want to increase diversity in FFA, we must make certain that each member not only feels safe and comfortable but also has ample opportunities to engage, grow and thrive within the organization."

He brought this message to life as a keynote speaker at the 96th National FFA Convention & Expo, asking members to turn their focus to the concept of belonging.

"Everyone can think back to a time when they felt like they didn't belong, whether at school, in an extracurricular or even with a friend group. I think we can agree it's unpleasant, to say the least," Flournoy says. "However, every FFA member has the power to make sure this doesn't happen when people come to our classrooms, chapter meetings, conferences and conventions."

In addition, he encouraged members to challenge themselves to look beyond their biases and fears, get out of their comfort zones and intentionally engage with people they may perceive as different.

"FFA offers so many beautiful opportunities to connect with people from all walks of life," Flournoy says. "Ultimately, it's up to each of us to take advantage of those opportunities — and when we do, we see they are incredible gifts."

National FFA is committed to creating a space where all members feel valued. To learn more, visit FFA.org/FFA-For-All.

Name: _____

Appendix 2: Paving a Path Forward

Part 1

Directions:

Read the article “Paving a Path Forward” in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. Who is Corey Flournoy?
2. What year was the first African-American National FFA president elected?
 - a. 1993
 - b. 1994
 - c. 1995
 - d. 1996
3. What company was co-founded by Flournoy in 1996?
4. What does this company do?
5. What is Flournoy’s ultimate goal?
6. At which national convention was Flournoy a keynote speaker?
 - a. 93rd
 - b. 94th
 - c. 95th
 - d. 96th
 - e. None of the above
7. Flournoy encouraged members to “challenge themselves to look beyond their biases and fears and get out of their comfort zones and intentionally engage with people they may perceive as different.” Give one example of how you plan to do this.

Name: _____

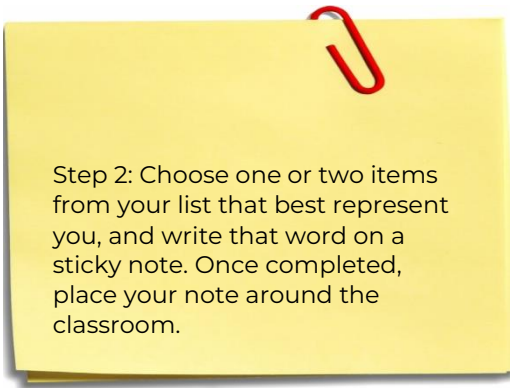
Part 2

Directions:

Diversity includes a range of people from various backgrounds. For this activity, you will need to make a list of characteristics that make you who you are. (Ex. age, education, ethnicity and national origin, gender and gender identity, lifestyles, experiences, etc.) Please include one item per box below.

1.

2.



3. Discuss the differences and similarities found around the classroom, and list a few characteristics that differ from yours. After listing differences, please provide a brief explanation on why diversity is important in classroom settings.

Name: _____

Part 3

Directions:

Choose a word from the word bank that is related to equity, diversity and inclusion, and write an acrostic poem using that word. To create an acrostic poem, write your selected word vertically in the area below. You will then generate a short phrase or sentence that begins with each letter of the vertical word. This phrase or sentence should be related to the word you selected.

Word bank:

Belonging, Culture, Diversity, Diverse, Different, Equal, Equity, Inclusion, Inclusive, Valued, Welcoming

Example:

F- For students looking for premier leadership, personal growth and career success through agricultural education

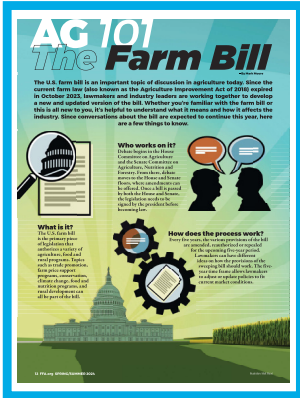
F- Farming is one of many career choices that members choose.

A- Agriculture classes are required for FFA members.



NEW HORIZONS

Spring/Summer 2024 TEACHING GUIDE



ARTICLE SUMMARY

AG101: THE FARM BILL

The U.S. farm bill is an important topic of discussion in agriculture today.

Bell Ringer

What do you know about the process of a legislative bill becoming law?

Discussion Questions:

1. How does a bill become the law of the land?
2. How does the federal government affect the agriculture industry?
3. How can agriculturists or consumers advocate for policy that is beneficial to the agriculture industry?
4. Why is it important that the farm bill is revisited, reauthorized, amended and updated every five years? Would any other timeframe make sense? Why or why not?

Activity:

Part 1: Have students read the article "Ag 101: The Farm Bill" in the spring/summer 2024 issue of *FFA New Horizons* and answer the comprehension questions on the student activity sheet.

Part 2: Assign students to research one of the 12 titles in the United States Farm Bill. Then, using the provided handout, they will create a portion of the class's Farm Bill 101 poster based on their assigned title. They can use the provided worksheet to complete their research and then use the worksheet specific to their chosen title to create their portion of the poster. Combine all 12 title pages together along with the Farm Bill 101 cover page and process explanation page to create one poster for the whole class to hang in your classroom (there will be 14 sheets total for your poster).

FFA Tip:

Have students engage with lawmakers in your area to learn more about the lawmaking process as well as to advocate for agriculture and agricultural education.

SAE Tip:

What SAE obstacles or opportunities does the farm bill present to your members? Are there proposed changes that will hurt or help a certain industry? Are there safety and health regulations that impact student-age workers/entrepreneurs?

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.01; CS.02, FFA PRECEPTS: FFA.PL-A; FFACS.M, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.ELA.RI.9-10.1; CCSS.ELA.RI.9-10.4, COMMON CORE-LITERACY IN SCIENCE & TECHNICAL SUBJECTS: WRITING, COMMON CORE-SCIENCE & TECHNICAL SUBJECTS, COMMON CORE – MATH PRACTICES: MP.2, COMMON CORE – WRITING: CCSS.ELA.W.9-10.1; CCSS.ELA.W.9-10.2, COMMON CORE – SPEAKING AND LISTENING: CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2; CCSS.ELA.SL.9-10.4, COMMON CORE LANGUAGE, COMMON CAREER TECHNICAL CORE: AG1; AG2, AFNR CAREER READY PRACTICES: CRP.02; CRP.04; CRP.05; CRP.06, NASDTEC-STATE DIRECTORS (CAREER CLUSTERS): AGC10.03, P21 SKILLS: COMMUNICATION; CRITICAL THINKING AND PROBLEM SOLVING; INFORMATION, COMMUNICATIONS AND TECHNOLOGY LITERACY; GLOBAL AWARENESS; THINK CREATIVELY

VOCABULARY

Amendment	Legislation
Bill	Policy
Commodities	Reauthorized
Debate	Repealed
Lawmaker	

EXIT TICKET

How does the farm bill directly impact you and your family?

CAREER FOCUS AREA

Agricultural Policy/Law

RESOURCE HIGHLIGHT

Ag Literacy and Advocacy: Hot Ag Topics
<https://ffa.box.com/s/wpu2jn50ene3s44viqwlyo-5g4vunwb7d>

REFERENCES

USDA, Farm Bill: <https://www.usda.gov/farmbill>
American Farm Bureau Federation, What Is the (Food and) Farm Bill and Why Does It Matter?: <https://www.fb.org/market-intel/what-is-the-food-and-farm-bill-and-why-does-it-matter>
Farm Aid, Farm Bill 101: <https://www.farmaid.org/issues/farm-policy/farm-bill-101/>

APPENDIX

Appendix 3: Ag 101: The Farm Bill

AG 101

The Farm Bill

- By Mark Moore

The U.S. farm bill is an important topic of discussion in agriculture today. Since the current farm law (also known as the Agriculture Improvement Act of 2018) expired in October 2023, lawmakers and industry leaders are working together to develop a new and updated version of the bill. Whether you're familiar with the farm bill or this is all new to you, it's helpful to understand what it means and how it affects the industry. Since conversations about the bill are expected to continue this year, here are a few things to know.



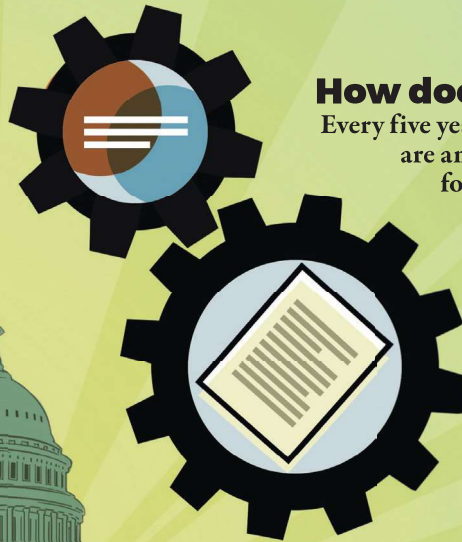
Who works on it?

Debate begins in the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition and Forestry. From there, debate moves to the House and Senate floors, where amendments can be offered. Once a bill is passed by both the House and Senate, the legislation needs to be signed by the president before becoming law.



What is it?

The U.S. farm bill is the primary piece of legislation that authorizes a variety of agriculture, food and rural programs. Topics such as trade promotion, farm price support programs, conservation, climate change, food and nutrition programs, and rural development can all be part of the bill.

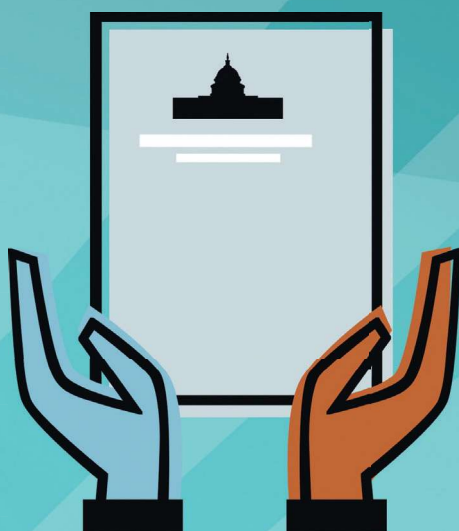


How does the process work?

Every five years, the various provisions of the bill are amended, reauthorized or repealed for the upcoming five-year period.

Lawmakers can have different ideas on how the provisions of the sweeping bill should work. The five-year time frame allows lawmakers to adjust or update policies to fit current market conditions.





Why is it important?

The farm bill started as legislation in the 1930s to support farmers and ensure food security for the nation. Since then, it has expanded to provide food and nutrition assistance, support rural communities, conserve natural resources, boost exports and more. For farmers, commodity support programs, crop insurance and marketing loans — all of which are included in the farm bill — can directly impact their work. The farm bill helps drive food and agriculture policy not only for the next five years, but also many years to come.

BREAKING IT DOWN

EACH FARM BILL IS DIVIDED INTO CHAPTERS (ALSO KNOWN AS TITLES) THAT COVER A SPECIFIC COMPONENT. THE 2018 VERSION OF THE FARM BILL WAS DIVIDED INTO THE FOLLOWING 12 TITLES.

- 1. Commodities**, which includes price and income support programs.
- 2. Conservation** programs aimed at farmers.
- 3. Trade**, including export and international aid programs.
- 4. Nutrition**, including food assistance programs designed for rural and urban communities.
- 5. Credit**, which includes loan and credit programs for farmers.
- 6. Rural Development** programs.
- 7. Research, Extension and Related Matters**, including extension, federal and state research, and educational programs.
- 8. Forestry** programs for farmers and rural communities.
- 9. Energy**, including biofuels and renewable energy programs.
- 10. Horticulture**, meaning farmers markets, local food programs, and support services for fruits, vegetables and other horticultural crops.
- 11. Crop Insurance**, which is funding used to assist farmers and protect against yield loss and crop price losses.
- 12. Miscellaneous** or programs that don't fit into other titles.



Name: _____

Aligned to the following standards: CS.01; CS.02; FFA.PL-A; FFA.CS.M; CCSS.ELA.RI.9-10.1; CCSS.ELA.RI.9-10.4; MP2; CCSS.ELA.W.9-10.1; CCSS.ELA.W.9-10.2; CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2; CCSS.ELA.SL.9-10.4; AG1; AG2; CRP.02; CRP.04; CRP.05; CRP.06; AGC10.03;

Appendix 3: Ag 101: The Farm Bill

Part 1

Directions:

Read the article "Ag 101: The Farm Bill" in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. What is the U.S. farm bill, and why is it currently a topic of discussion in agriculture?
2. Describe the legislative process of the U.S. farm bill from committee debates to becoming law.
3. How often are the provisions of the farm bill amended, reauthorized or repealed? Why is this time frame significant in the farm bill process?
4. What are the 12 topics (titles) covered in the farm bill?
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.
 - 7.
 - 8.
 - 9.
 - 10.
 - 11.
 - 12.



5. Describe the impact the farm bill has on the agriculture industry.

Name: _____

Part 2

Directions:

As assigned by your teacher, research one of the 12 titles in the United States Farm Bill. Then, using the provided handout, create your portion of the class's Farm Bill 101 poster. You must include the information from the questions below, but you can also include any other information you discover that is relevant to your assigned title. Be sure to include at least **one image** as well!

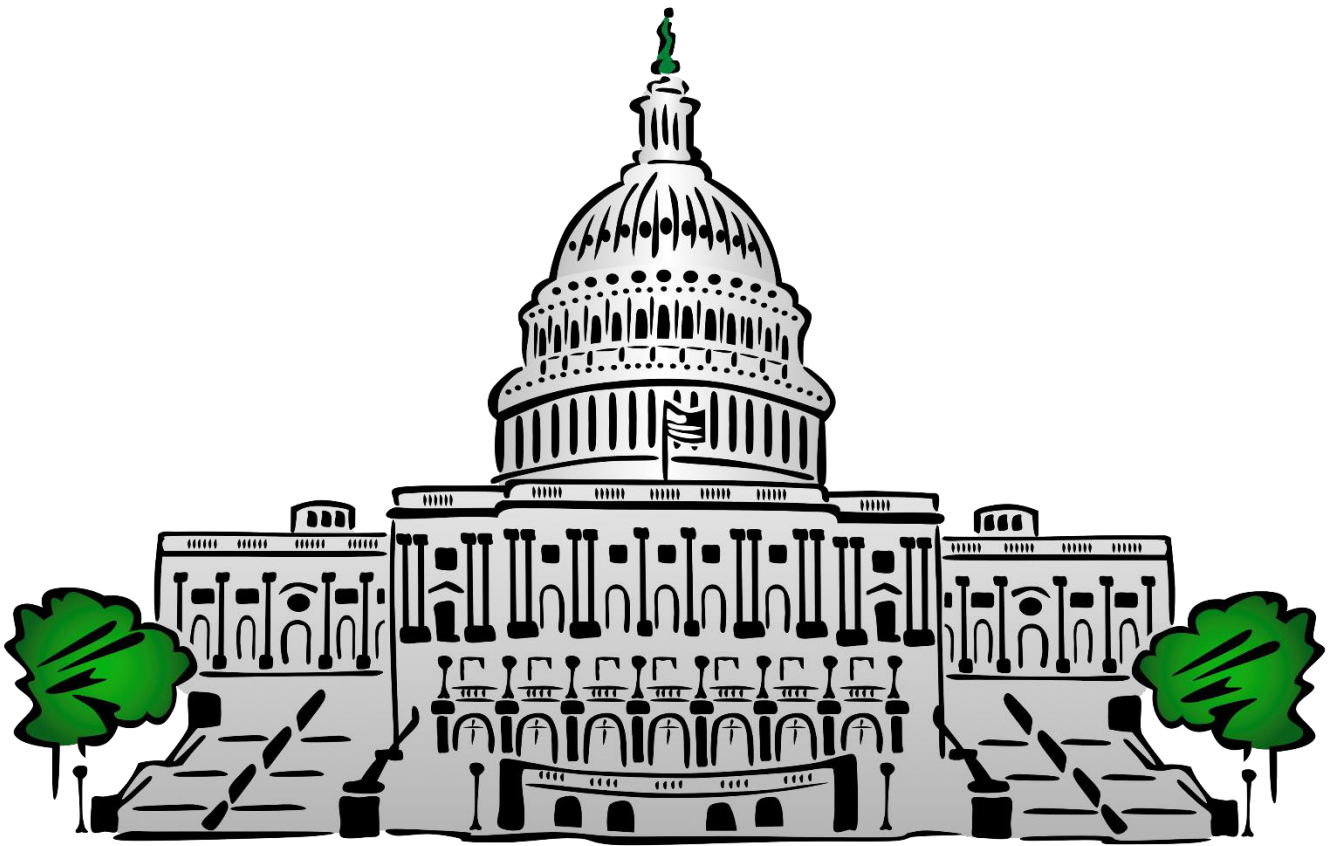
Some of the following sites may be helpful to you in your research:

- USDA, Farm Bill: <https://www.usda.gov/farmbill>
- American Farm Bureau Federation, What Is the (Food and) Farm Bill and Why Does It Matter?: <https://www.fb.org/market-intel/what-is-the-food-and-farm-bill-and-why-does-it-matter>
- Farm Aid, Farm Bill 101: <https://www.farmaid.org/issues/farm-policy/farm-bill-101/>

1. Describe the purpose of this title in one or two sentences.
2. What kinds of programs are included within this title?
3. Who is mainly affected by this title?
4. How much money was allocated to this title in the most recent farm bill?
5. Record any other information about this title that you'd like to include on the poster:

Once all the pages are completed for each title, assemble all 12 title pages together along with the Farm Bill 101 cover page and process explanation page to create your class's Farm Bill 101 poster.

FARM BILL 101



Class Name & Period:

What is the Farm Bill?

The U.S. farm bill is the primary piece of legislation that authorizes a variety of agriculture, food and rural programs. Topics such as trade promotion, farm price support programs, conservation, climate change, food and nutrition programs and rural development can all be part of the bill.

Who works on it?

Debate begins in the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition and Forestry. From there, debate moves to the House and Senate floors, where amendments can be offered. Once a bill is passed by both the House and Senate, the legislation needs to be signed by the president before becoming law.

How does the process work?

Every five years, the various provisions of the bill are amended, reauthorized or repealed for the upcoming five-year period. Lawmakers can have different ideas on how the provisions of the sweeping bill should work. The five-year time frame allows lawmakers to adjust or update policies to fit current market conditions.

How does the process work?

The farm bill started as legislation in the 1930s to support farmers and ensure food security for the nation. Since then, it has expanded to provide food and nutrition assistance, support rural communities, conserve natural resources, boost exports and more. For farmers, commodity support programs, crop insurance and marketing loans — all of which are included in the farm bill — can directly impact their work. The farm bill helps drive food and agriculture policy not only for the next five years, but also many years to come.

TITLE 1: Commodities

TITLE 2: Conservation

TITLE 3: Trade

TITLE 4: Nutrition

TITLE 5: Credit

TITLE 6: Rural Development

TITLE 7: Research, Extension and Related Matters

TITLE 8: Forestry

TITLE 9: Energy

TITLE 10: Horticulture

TITLE 11: Crop Insurance

TITLE 12: Miscellaneous



NEW HORIZONS

Spring/Summer 2024 TEACHING GUIDE



ARTICLE SUMMARY

FOR THE LOVE OF LIVESTOCK

Sonoma FFA alumnus discovered possessing a passion for animals and a willingness to learn was the key to gaining new experiences.

Bell Ringer

Explain what you think “meat judging” includes in the agriculture industry.

Discussion Questions:

1. What are four species of livestock that we get meat from?
2. Can you name any cuts of meat from beef cattle?
3. Why do you think competitions such as meat judging are important for the future of the agriculture industry?

Activity:

Part 1: Have students read the article “For the Love of Livestock” in the spring/summer 2024 issue of *FFA New Horizons* and answer the comprehension questions on the student activity sheet.

Part 2: Students will use a page on the American Meat Science Association website to answer questions on the student activity sheet and learn about the Intercollegiate Meat Judging Program. Students will also explore sponsors of the competition and interpret how the competition can benefit those companies.

Part 3: Using the Certified Angus Beef website, students will explore meat cuts from beef cattle. They will determine where retail cuts of meat come from on beef cattle and identify different cuts of meat.

FFA Tip:

Encourage your students to explore the meats evaluation and technology CDE and create a team to compete. Guidelines and resources can be found [here](#).

SAE Tip:

Have students rank a list of agricultural or natural resources fields by how familiar they are with each field. Assign them to present an SAE plan to fit in the field they ranked as being the least familiar. Encourage them to explore local, state, national and international connected opportunities. Have them present the plans to the class to give everyone a look at a wide variety of career fields.

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.01, CS.05, CS.06, FFA PRECEPTS: FFA-PL-A, FFA-PL-C, FFA-PL-E, FFACS-P, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.RI.9-10.1, CCSS.RI.9-10.2, COMMON CORE-LITERACY IN SCIENCE & TECHNICAL SUBJECTS: WRITING, COMMON CORE-SCIENCE & TECHNICAL SUBJECTS, COMMON CORE – MATH PRACTICES, COMMON CORE – WRITING: CCSS.W.9-10.2, COMMON CORE – SPEAKING AND LISTENING, COMMON CORE LANGUAGE, COMMON CAREER TECHNICAL CORE: AG1, AG5, AG6, AFNR CAREER READY PRACTICES: CRP.02, CRP.05, CRP.07, CRP.08, P21 SKILLS: INFORMATION, COMMUNICATION AND TECHNOLOGY LITERACY, CRITICAL THINKING AND PROBLEM SOLVING; INFORMATION LITERACY

VOCABULARY

Intercollegiate
Meat Judging
Retail Cuts

EXIT TICKET

Do you think regular consumers should learn where their retail cuts of meat come from? Why or why not?

CAREER FOCUS AREA

Meat Science and Technology

RESOURCE HIGHLIGHT

Digital New Horizons Lesson: Tough Work for Tender Meats
<https://ffa.box.com/s/8z2mr92evtdueznrfk6bx-7q7c3agsb0>

REFERENCES

American Meat Science Association, AMSA
Intercollegiate Meat Judging, What Is Meat Judging?: <https://meatscience.org/students/meat-judging-program#>
Certified Angus Beef Brand, Basics of Beef Cuts: <https://www.certifiedangusbeef.com/cuts/>

APPENDIX

Appendix 4: For the Love of Livestock

FOR THE LOVE OF LIVESTOCK

SONOMA FFA ALUMNUS DISCOVERED POSSESSING A PASSION FOR ANIMALS AND A WILLINGNESS TO LEARN WAS THE KEY TO GAINING NEW EXPERIENCES. — By Jodi Helmer

Although Casey Spencer started showing pigs and cattle in middle school and had odd jobs working on farms, he never thought about pursuing a career in agriculture. He changed his mind after his Sonoma FFA advisor took him to a California state FFA convention as a high school freshman. “My mind was blown,” Spencer says. “There were so many people who were so passionate about agriculture, and there was so much out there to do in agriculture.”

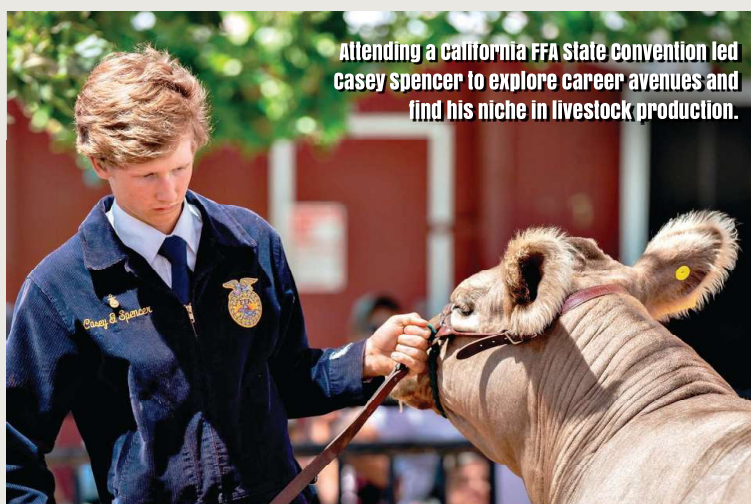
The experience encouraged Spencer to pursue diverse opportunities to see what piqued his interest. In 2020, he used the knowledge and skills gained while working for a draft horse operation to start Spencer Farrier Services. Running his own business helped Spencer connect with ranchers, which led to additional opportunities — including a job working for a beef cattle operation.

“I just put my head down and picked up work where I could,” he says. “Even if it was something I wasn’t 100% into, I gave it a shot and a lot of times it turned out to be a great experience.”

The combination of loving livestock, having a positive attitude and being willing to try new things also changed the trajectory of Spencer’s future.

A NEW CHAPTER

Instead of going to a local junior college, Spencer’s advisor pushed



Attending a California FFA state convention led Casey Spencer to explore career avenues and find his niche in livestock production.

him to consider a different path. He applied to and was accepted into the University of Wyoming, where he’s majoring in agricultural business and farm and ranch management.

During his sophomore year, Spencer joined the university’s meat judging team and has since traveled around the United States and Australia to compete.

“Casey was one of the top performers from the get-go,” says McKensie Phillips, coordinator of the meat judging team at the University of Wyoming. “Among his teammates, Casey is the one who genuinely enjoys the process of learning how to evaluate meat products and challenges himself to reach expert level.”

In Australia, Spencer’s skills also caught the attention of local ag industry professionals. He received

offers to work on cattle ranches and with an international beef distributor.

Spencer, who earned his American FFA Degree this past November, is committed to finishing college, but he plans to keep his options open after he graduates in 2025.

“My advisors have done so much to build my confidence and encourage me to see where [agriculture] can take me,” he says. “It’s been good for me to get out and explore different parts of the country and to try new things and have a lot of experiences.”

DIVE INTO AG CAREERS

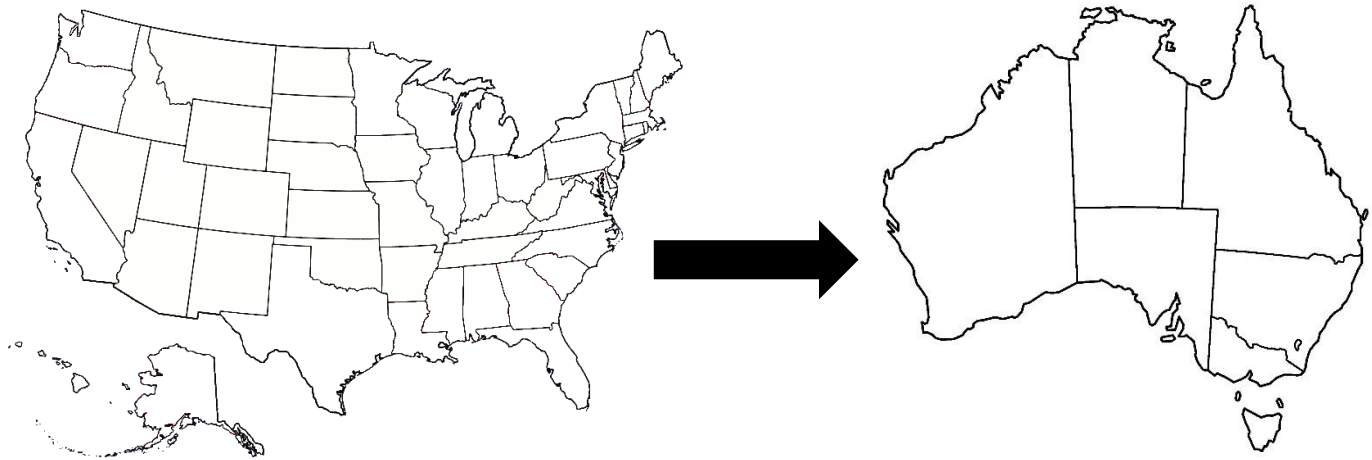
Want to explore jobs or internships in the agriculture industry? Visit ForeverBlueNetwork.org.

Name: _____

7. During his sophomore year in college, which team did Casey join?

- A. Livestock Evaluation Team
- B. Livestock Showing Team
- C. Meats Judging Team
- D. Meat Grilling Team

8. Label the countries shown below where Casey has competed with his college:



9. While competing in Australia, what happened to Casey?

10. When did Casey earn his American FFA Degree?

11. Based on this article, name two potential supervised agricultural experiences (SAEs) that you think Casey used on his American FFA Degree application:
(Learn more about SAEs here, <https://saeforall.org/>.)

12. Who does Casey say helped him build his confidence and explore agriculture more?

Name: _____

Part 2

Directions:

Using the American Meat Science Association website (<https://meatscience.org/students/meat-judging-program>), answer the following questions.

1. The Intercollegiate Meat Judging Program (IMJP) started in which year?

- A. 1969
- B. 1926
- C. 1990
- D. 1928

2. Where did the Intercollegiate Meat Judging Program start?

3. Contests for the IMJP have been held every year since it started, except 1942-1945. Why was it not held in those years?

4. Today, there are six contests.

List them:

-
-
-
-
-
-

5. Meat judging programs are an effective tool for what?

6. Fill in the blanks on how participating on a meat judging team can benefit someone:

- Learn how to determine the _____ of meat
- Learn how to determine the _____ meat yield of a carcass or wholesale cut
- Serves as a _____ tool for youth and college students
- The deep-rooted _____ of the meat industry

Scroll to the bottom of the page. There is a section that has logos of sponsors. Choose one logo and click on it. Browse the website for that sponsor. Below, explain in your own words why you think this company is sponsoring the Intercollegiate Meat Judging Program. Think of what benefit this company could receive.

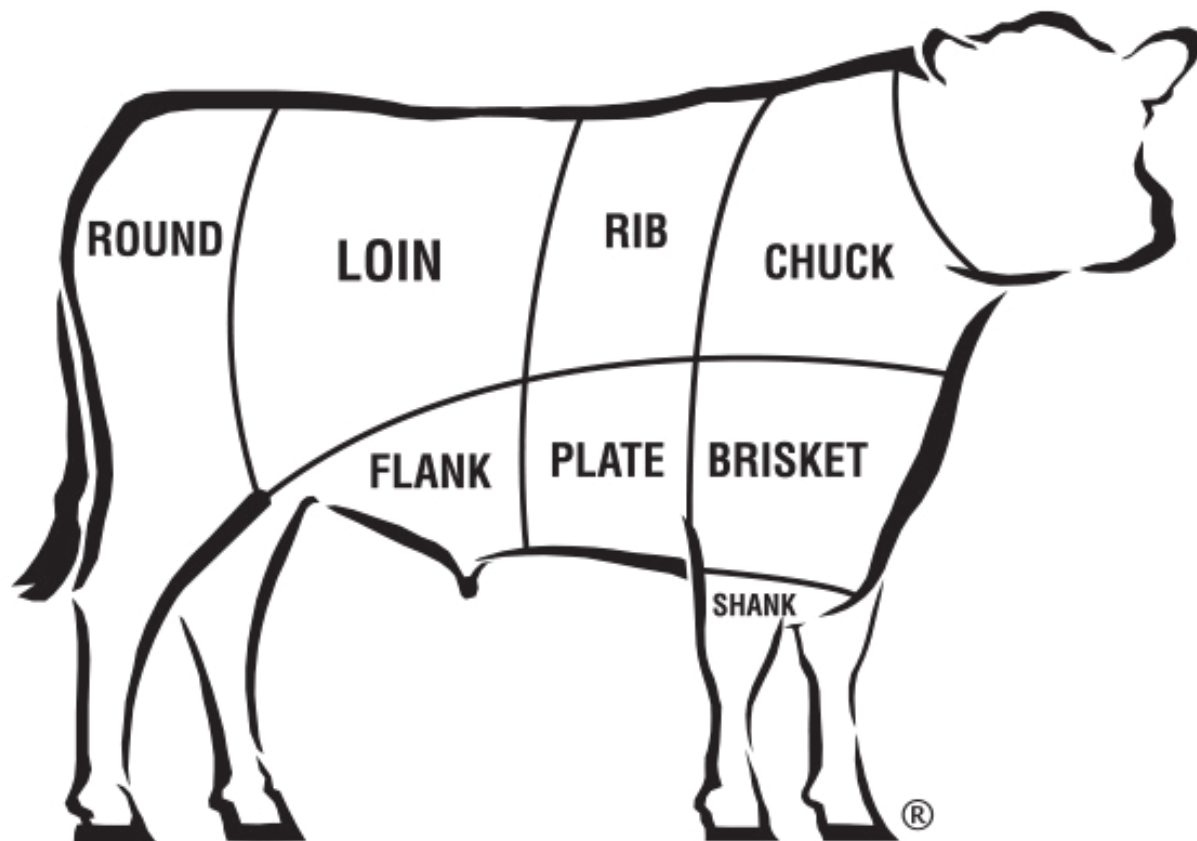
Name: _____

Part 3

Directions:

Getting started in meat judging requires basic knowledge of where retail cuts of meat come from. Use the Certified Angus Beef site to help you with this activity: <https://www.certifiedangusbeef.com/cuts/>.

Below is a beef steer with sections marked to help you learn where retail cuts of meat come from. For each section, draw a line to the empty space around the steer and list two retail cuts of meat from that section.



Name: _____

Now, using the same website as the previous activity, draw a line to match the beef retail cut with its correct name.



Ribeye Roast

Flat Iron



Whole Brisket



Boneless Country Style Ribs



Inside Skirt

Filet Mignon



Tri-Tip Steak



Cowboy Steak

Top Round Roast



Tenderloin Roast





NEW HORIZONS

Spring/Summer 2024 TEACHING GUIDE



ARTICLE SUMMARY **WIRED FOR GROWTH**

This North Clackamas FFA member developed a creative, high-tech solution to produce more feed for the campus farm.

Bell Ringer

Have you ever come up against a project at school or at home that seemed insurmountable? What was it? How did it turn out?

Discussion Questions:

1. What is fodder? What role does it play in the diet of livestock animals?
2. What did you think about Evan Vander Stoep's process for revitalizing the fodder system?
3. What projects around your school and agriculture department can you see that might benefit from your attention?

Activity:

Part 1: Have students read the article "Wired for Growth" in the spring/summer 2024 issue of *FFA New Horizons* and answer the comprehension questions on the student activity sheet.

Part 2: Evan Vander Stoep saw a need and a potential project in his school's agriculture program and took action. Have students use the student activity sheet to identify a potential project based on a need in your school's agriculture program or FFA chapter and make a plan for how they could tackle that challenge.

FFA Tip:

Students could team up with other students to tackle their projects. If they need funds to help complete their projects, they could apply for funding from the National FFA Grants for Growing program.

SAE Tip:

What "nonagricultural" interests do your students have that can be applied to agriculture and natural resources? Whether it's artistic students shooting catalogue pictures for livestock auctions or making realistic decoys to attract or repel other animals or science-oriented students working to boost crop yields, almost any interest can be applied to agriculture with a little creativity.

VOCABULARY

Aquaponics
Controlled-environment agriculture
Fodder
Germination
Hydroponics

EXIT TICKET

What is your next step toward completing the project you have outlined?

CAREER FOCUS AREA

Any; Plant Systems

RESOURCE HIGHLIGHT

Giovanni Roman–SAE Video/Lesson:
Hydroponics: <https://ffa.box.com/s/0x5p4lv26wo-8qam3v6uszr6hepemt8o2>

FFA Grants for Growing: [FFA.org/grants-for-growing/](https://ffa.org/grants-for-growing/)

APPENDIX

Appendix 5: Wired for Growth

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.01; CS.05, FFA PRECEPTS: FFA.PLA; FFA.PLC; FFA.PLF; FFA.PGI; FFA.CS.N, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.ELA.RI.9-10.1; CCSS.ELA.RI.9-10.4, COMMON CORE-LITERACY IN SCIENCE & TECHNICAL SUBJECTS: WRITING, COMMON CORE-SCIENCE & TECHNICAL SUBJECTS, COMMON CORE – MATH PRACTICES: MP2; MP6, COMMON CORE – WRITING: CCSS.ELA.W.9-10.2, COMMON CAREER TECHNICAL CORE: AG1; AG5, AFNR CAREER READY PRACTICES: CRP.02; CRP.06; CRP.08, NASDCTEC-STATE DIRECTORS (CAREER CLUSTERS): AGC08.01; AGC09.02, P21 SKILLS: CRITICAL THINKING AND PROBLEM SOLVING; INITIATIVE AND SELF-DIRECTION; THINK CREATIVELY



WIRED FOR GROWTH

THIS NORTH CLACKAMAS FFA MEMBER DEVELOPED A CREATIVE, HIGH-TECH SOLUTION TO PRODUCE MORE FEED FOR THE CAMPUS FARM.

BY JODI HELMER | PHOTOGRAPHY BY JEFF NOBLE

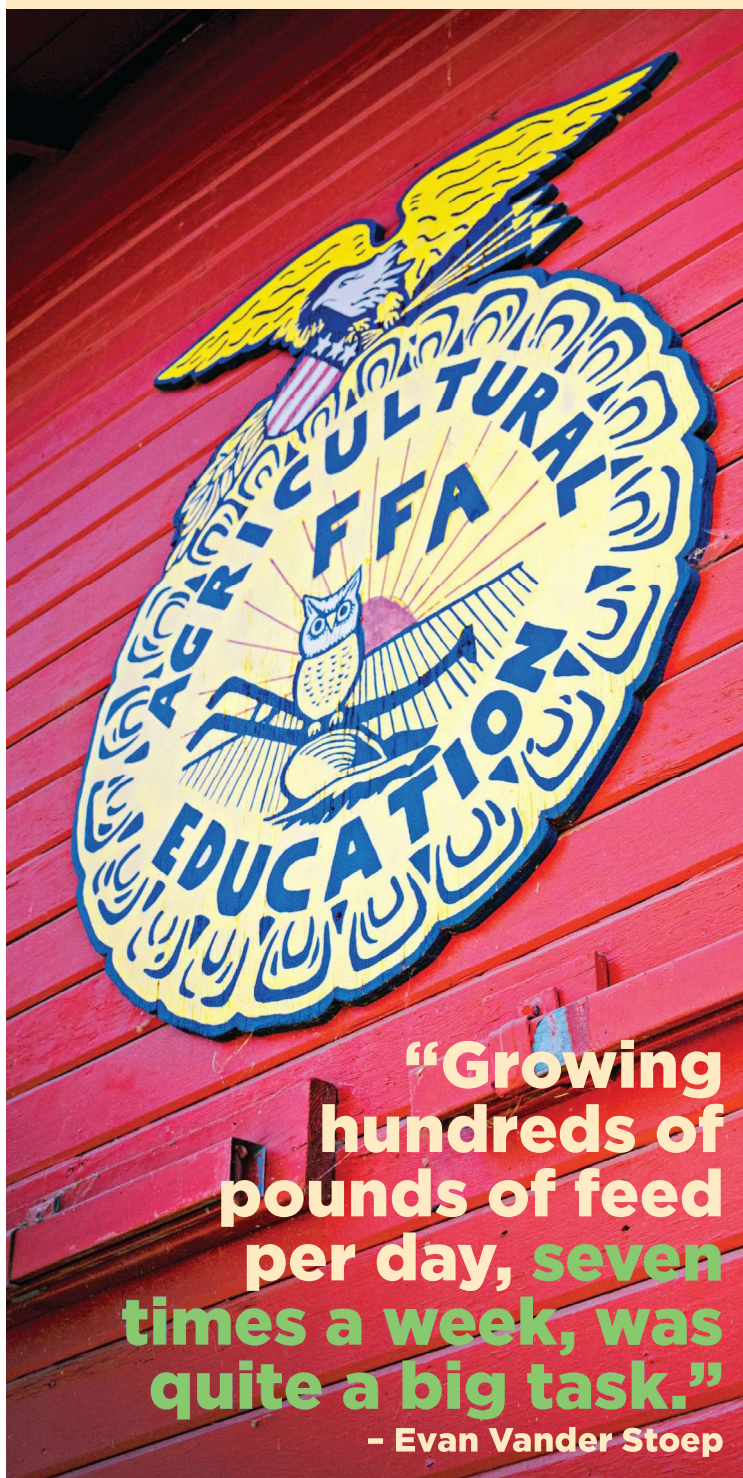
Evan Vander Stoep was a junior at Milwaukie High School when he first saw the fodder greenhouse on the farm that the agriscience class used to grow barley fodder.

“It was all in shambles, just pieced together,” he recalls. “There were parts all over the place, and it looked like it would never work.”

Although the system appeared beyond repair,

Vander Stoep welcomed the challenge to get it working again. He started tinkering with the parts and sketching designs in January 2021. Even when it looked plausible on paper, agricultural education teacher and North Clackamas FFA advisor Kathy Mayfield was skeptical it could be fixed.

“My first thought was, ‘Does he really know what he’s doing?’” she says.



FEEDING THE FARM

The North Clackamas FFA Chapter is an urban program in Oregon. The 10-acre school farm is home to 32 producing ewes and six cows that consume more than 400 pounds of fodder per day, but the farm has a lack of acreage to grow crops and few opportunities to teach students about crop production.

Mayfield introduced controlled-environment agriculture almost a decade ago. The vertical racks allow the chapter to grow a lot of feed in a small space at a rapid pace. Her goal was to produce enough fodder to feed the livestock on the campus farm.

"It offers us the ability to teach kids how to produce a crop we feed to our animals," she says. "It's also very hands-on in terms of doing a cost analysis from an ag business standpoint, so it's multifaceted in terms of its application."

A 20x40-foot greenhouse on the campus farm was the ideal location to start a commercial-size barley fodder operation. Previous classes had installed a flood-and-drain system to fill trays with water that soaks the seed; these systems are common in commercial facilities but led to excess seed washout and poor production in the campus greenhouse.

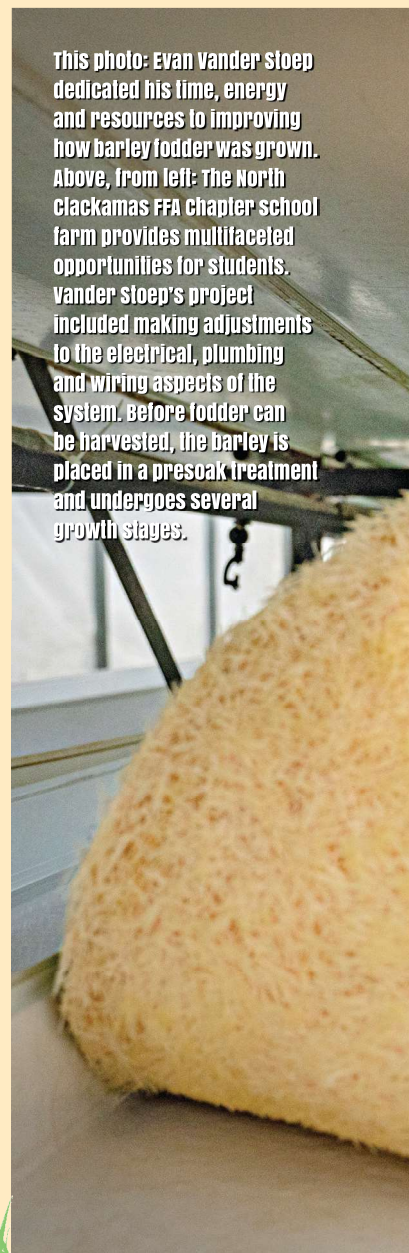
In 2014, FFA members conducted an agriscience project to compare the performance of the flood-and-drain system with a mister system. The misters decreased mold levels and increased production, leading Mayfield to make the switch. However, the new system was not up and running, with most of the system torn apart when the COVID-19 pandemic shut down the operation.

When classes resumed,

Vander Stoep was in the class responsible for getting the system running again after two years offline. Vander Stoep had some experience working on aquaponics and hydroponics using small fish tanks but admits, "Growing hundreds of pounds of feed per day, seven times a week, was



This photo: Evan Vander stoep dedicated his time, energy and resources to improving how barley fodder was grown. Above, from left: The North Clackamas FFA chapter school farm provides multifaceted opportunities for students. Vander stoep's project included making adjustments to the electrical, plumbing and wiring aspects of the system. Before fodder can be harvested, the barley is placed in a presoak treatment and undergoes several growth stages.



quite a big task.”

Chris Guntermann, a greenhouse specialist, provided input on designs. The blueprints went through five revisions before Vander Stoep felt confident enough to order parts and start construction.

“Ms. Mayfield was amazing in the way she

supported me,” Vander Stoep says. “She basically said, ‘I’m going to let this high schooler go and spend hundreds of dollars on plumbing and electrical parts and hope it works.’”

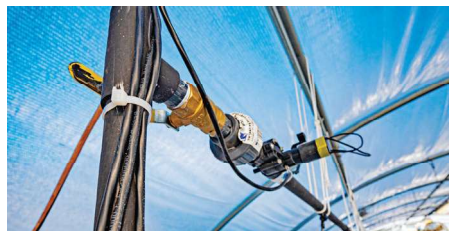
CONCEPT TO COMPLETION

Vander Stoep devoted all his

spare time to working on the fodder system, managing all the tasks including electrical, plumbing and writing the code for the controller. He often worked late into the evening to assemble the system and test configurations. Every day for more than four weeks, Vander Stoep traveled to the

farm for the initial system trials to harvest and reseed the system himself, a two-hour daily process. He then trained other students to help run the system.

“It’s so rare that students take ownership to that level,” Mayfield says. “He didn’t just take it on to completion; he took it to a higher level



than the industry standard.”

From the initial design, Vander Stoep continued making tweaks. In the original design, which he dubbed, “the spaghetti noodle disaster,” the valves that controlled the irrigation on each level of the racks were on the floor with hoses running off them.

Vander Stoep recognized it was a mess — and a tripping

hazard — and switched the design so the hoses were affixed to the ceiling. The goal, he explains, was to position all the equipment so it was safe but accessible in case it needed repairs. He also made several other modifications, including programming a specialized industrial programmable logic controller (PLC) to work for the smaller-scale

irrigation system to help manage the humidity in the greenhouse.

When the time came to grow fodder, Vander Stoep still had some reservations.

“I was confident the plumbing and electrical were going to work,” he says. “but I wasn’t sure I could hit the production goals Mayfield wanted to hit.”

Mayfield challenged

Vander Stoep to optimize the moisture levels, temperature and humidity to produce 7 pounds of fodder per pound of seed, but the initial results were disappointing.

The irrigation controller and climate control settings Vander Stoep initially spent days refining produced a volume of fodder as low as 3.2 pounds per



This photo: Barley fodder serves as a nutritious food source for the six cows that live on the North clackamas FFA school farm. Above, left to right: Advisor Kathy Mayfield provided Vander stoep with the creative freedom to develop a more efficient fodder system. After barley fodder is harvested and prepared, it's fed to the school's animals, including 32 producing ewes. The system allows students to learn about crop production.

EVERY DAY FOR MORE THAN FOUR WEEKS, VANDER STOEP TRAVELED TO THE FARM FOR THE INITIAL SYSTEM TRIALS TO HARVEST AND RESEED THE SYSTEM HIMSELF, A TWO-HOUR DAILY PROCESS. HE THEN TRAINED OTHER STUDENTS TO HELP RUN THE SYSTEM.



pound of seed, which was barely enough to feed six cows. Vander Stoep was undeterred.

“Electronics have always been my passion,” he says. “I like being hands-on and working on stuff, and it’s amazing to work on these things I would never have the ability to do if it wasn’t for FFA.”

With continued tweaks (coupled with a stubborn refusal to give up), Vander Stoep started seeing improvements in production. He quickly decided to turn his experimentation into an agriscience project.

SEED GERMINATION SCIENCE

Before each batch of fodder is started, four 15-pound bags of seed are soaked in 5-gallon buckets with water and an ounce of bleach for 24 hours. Vander Stoep wondered whether the water temperature during the seed priming presoak affected the ending production weights.

To test the impact, Vander Stoep filled two of the buckets with regular hose water of about 50 degrees Fahrenheit and used a 300-watt aquarium heater to control the temperature of the water in two other buckets, changing the temperature to collect data on the impact of a wide temperature range. The 15-pound bags of seed would then be lowered into the four buckets of water and left to soak for 24 hours.

It didn’t take long to see a clear pattern of the impact the water temperature during the presoak had on production (based on harvested weight) once the seed was planted.

“I noticed there was a peak in production weights

when the seed was soaked in water in the 72- to 75-degree range,” Vander Stoep says. “Temperatures above 80 degrees were way too high. At those high temperatures, [the seed] started degrading and production levels were sometimes below normal.”

Vander Stoep suspects the warm presoak better penetrates the seed, allowing it to hold more water and provide a boost during sprouting. The findings could help the North Clackamas FFA Chapter produce an extra 40 pounds of fodder per day, therefore feeding more animals.

The project earned Vander Stoep first place in the Oregon Agriscience Fair and a spot as a 2023 National FFA Agriscience Fair finalist.

TAKING THE NEXT STEP

Vander Stoep graduated in 2023 and accepted a position as a radio tower technician. He travels around the country repairing and installing technical equipment, which sometimes requires climbing hundreds of feet into the air to work on the tower’s antennas and lights.

Similar to redesigning the irrigation system for the barley fodder operation, repairing radio towers requires top-notch technical and problem-solving skills. Vander Stoep is enjoying traveling to different states for work but hopes to return to agriculture in the future.

“I have a creative side; I like to come up with new ideas and design custom components,” he says. “I want to put those passions to use and continue down an agricultural path; it’s something I’m interested in and passionate about.”

Name: _____

Aligned to the following standards: CS.01; CS.05; FFA.PLA; FFA.PLC; FFA.PL.F;
FFA.PG.I; FFA.CS.N; CCSS.ELA.RI.9-10.1; CCSS.ELA.RI.9-10.4; MP2; MP6;
CCSS.ELA.W.9-10.2; AG1; AG5; CRP.02; CRP.06; CRP.08; AGC08.01; AGC09.02;

Appendix 5: Wired for Growth

Part 1

Directions:

Read the article "Wired for Growth" in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. What sparked Evan Vander Stoep's interest in reviving the fodder greenhouse system at Milwaukie High School?
2. How did Evan's advisor, Kathy Mayfield, initially perceive his efforts to fix the greenhouse system?
3. How many pounds of fodder do the animals at the North Clackamas FFA Chapter eat per day? How many pounds per week would that be?
4. Describe the controlled-environment agriculture fodder system introduced by Mayfield. What was its primary goal?
5. What were the benefits of switching from the initial flood-and-drain system to the mister system? How did the chapter discover this and make the decision to switch?
6. Who helped to support Evan's efforts to revive the fodder system?



Name: _____

7. Describe Evan's process of fixing up and tweaking the system's designs.

8. What kinds of skills did he have to learn and use throughout the process of reviving the fodder production system?

9. How did Evan experiment with seed soaking, and what significant findings did he discover regarding the impact of water temperature on seed soaking?

10. What is Evan doing now? What parallels does he draw to his work on reviving the fodder system?



I have a creative side; I like to come up with new ideas and design custom components. I want to put those passions to use to continue down the ag path; it's something I'm interested in and passionate about.

—Evan Vander Stoep



Name: _____

Part 2

Directions:

Evan Vander Stoep saw a need and a potential project in his school's agriculture program and took action. There are endless opportunities for growth in our schools and communities. Now it's your turn. Using this activity sheet, identify a potential project based on a need in your school's agriculture program or FFA chapter and make a plan for how you could tackle that challenge.

Project Title:	
Description of Need/Opportunity (Scope): <i>(four or five sentences)</i>	
Project Outcomes: <i>(List at least three specific outcomes for your project (i.e., What will it look like when you're done?).</i>	
1.	
2.	
3.	
Materials and/or Skills Needed: <i>(List at least five specific things.)</i>	Project Supporters: <i>(Think of at least two individuals who can support your efforts. List their names and how they can help.)</i>
1.	1.
2.	
3.	
4.	2.
5.	

Name: _____

SMART Goal 1 <i>(Write a goal for the project using the SMART formula.)</i> SMART Goals: Specific, Measurable, Attainable, Relevant, Time-Bound	SMART Goal 2 <i>(Write a goal for the project using the SMART formula.)</i> SMART Goals: Specific, Measurable, Attainable, Relevant, Time-Bound
Timeline: <i>(Brainstorm at least three specific milestones for your project.)</i> 1. 2. 3.	
Questions: <i>(List at least three specific questions you have about this project that you can ask your agriculture teacher.)</i> 1. 2. 3.	

1. Why did you choose this project? What is your interest in it?
2. How will completing this project help you with your future goals?



NEW HORIZONS

Spring/Summer 2024 TEACHING GUIDE



ARTICLE SUMMARY

HANDS-ON EDUCATION

Bristol County Agricultural High School students prepare for career success by learning to do and doing to learn every day.

Bell Ringer

If you could take any agriculture subject at your school (even subjects not offered), what would it be and why?

Discussion Questions:

1. There are only a few agricultural high schools (schools that focus heavily on agriculture) in the country. Do you think there should be more? Why?
2. If someone enjoys working with small animals and conducting research, what type of careers could they pursue that combines the two?
3. Do you believe a career that works with trees or wildlife is considered agricultural? Why or why not?

Activity:

Part 1: Have students read the article "Hands-On Education" in the spring/summer 2024 issue of FFA New Horizons and answer the comprehension questions on the student activity sheet.

Part 2: Students will research three specific agricultural careers that relate to the students in the article. They will use AgExplorer to answer questions about each career.

FFA Tip:

Even if your school does not offer a wide variety of agricultural classes, FFA officers can plan an agriculture field day or agriculture career fair. This event can be open to all FFA members or even all students at the school. Invite local representatives from different sectors in the agriculture industry to showcase what they do.

SAE Tip:

What facilities and equipment at your school can be used for student SAEs? With a little cooperation from school administration and some creativity, sports fields, landscaping, shops, greenhouses, etc. can all be utilized by students outside of class time for School-Based or individual SAEs.

VOCABULARY

Animal Research
Arboriculture
Immunology
Virology

EXIT TICKET

What three career pathways were focused on in this activity?

CAREER FOCUS AREA

Biotechnology Systems
Environmental Service Systems
Natural Resources Systems
Agricultural Education

RESOURCE HIGHLIGHT

AgExplorer Implementation Guide
<https://ffa.box.com/s/w3o6ep5l2509qtw1fsgrk-c718o3d143m>

REFERENCES

AgExplorer: AgExplorer.FFA.org/

APPENDIX

Appendix 6: Hands-On Education

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.05, FFA PRECEPTS: FFA-PL-A, FFA-PL-C, FFA-PL-E, FFA-PG-I, FFA-CS-N, FFA-CS-P, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.RI.9-10.1, COMMON CORE-LITERACY IN SCIENCE & TECHNICAL SUBJECTS: WRITING, COMMON CORE-SCIENCE & TECHNICAL SUBJECTS, COMMON CORE – MATH PRACTICES, COMMON CORE – WRITING: CCSS.W.9-10.2, CCSS.W.9-10.7, CCSS.W.9-10.9, COMMON CORE – SPEAKING AND LISTENING, COMMON CORE LANGUAGE, COMMON CAREER TECHNICAL CORE: AGS, AFNR CAREER READY PRACTICES: CRP.02, CRP.07, CRP.08, CRP.10, CRP.11, NASDCTEC-STATE DIRECTORS (CAREER CLUSTERS): AGC09.02, P21 SKILLS: CRITICAL THINKING AND PROBLEM SOLVING; INFORMATION LITERACY; INITIATIVE AND SELF-DIRECTION

HANDS-ON Education

—  **Bristol County Agricultural High School students prepare for career success by learning to do and doing to learn every day.**  —

BY COURTNEY LEEPER GIRGIS

PHOTOGRAPHY BY DAVID EKSTROM

Some students spend as many as 2½ hours each morning and afternoon riding the bus to attend Bristol County Agricultural High School in Dighton, Mass. — commonly referred to as Bristol Aggie.

“It’s incredible how far they’re willing to travel to come here and spend their days with us,” says Leslie Blanchette, chair of the Bristol Aggie Animal Science Department and Bristol County FFA advisor.

Students come for hands-on education, adds Blanchette, a 1995 alum of the school. Bristol Aggie is one of only five agricultural high schools in the country, according to Blueprint magazine. Three of them are in Massachusetts.

When the Massachusetts Legislature started Bristol Aggie in 1912, it was an all-boys farm school. Boys moved to the campus to

learn how to become better farmers. In early spring through summer, they returned to their family farms to practice what they learned. Girls joined in the 1960s, although the first female student, Elizabeth

Today, Bristol Aggie sits on more than 220 acres along the Taunton River and offers seven majors: agricultural mechanics, animal science, arboriculture, floriculture, landscape design and contracting, natural resource management and environmental engineering.

Bowen, attended in 1936.

Today, Bristol Aggie sits on more than 220 acres along the Taunton River and offers seven majors: agricultural mechanics, animal science, arboriculture, floriculture, landscape design and contracting, natural resource management and environmental engineering. Each student becomes an FFA member and selects a major in the fourth term of their freshman year, after exploring each option. Half their days are spent studying academics. The other half is focused on vocational training — in and outside the classroom.

To get into Bristol Aggie, students participate in a competitive application process. They come from more than 16 towns and four cities in Bristol County as well as up to 16 out-of-county districts each year, and their agricultural backgrounds vary. One student may have grown

up on a 1,000-cow dairy farm, while another lives in a third-floor apartment and hasn’t seen a cow until arriving at Bristol Aggie.

Here are three of their stories.

Connecting Animal Science to Human Health

Julianne Dufresne

enjoys watching the different personalities of the rats, mice, rabbits, guinea pigs and birds she cares for as a senior animal science major. The Bristol County FFA president feeds and performs physical exams on small animals as part of the veterinary science and laboratory animal technology concentration, one of four in the animal science department. Last year, she spent time bonding with an African gray parrot named Rocco, who learned voice tricks.

Dufresne also occasionally works with the school’s horses, pigs, sheep and dairy



**“All of this experience
has given me
confidence with
animals. I can
handle any
mouse, any
rat or any bird
someone puts
in front of me,
and I can do it
with confidence.
That will be huge,
especially in a
doctorate program.”**

– Julianna Dufresne



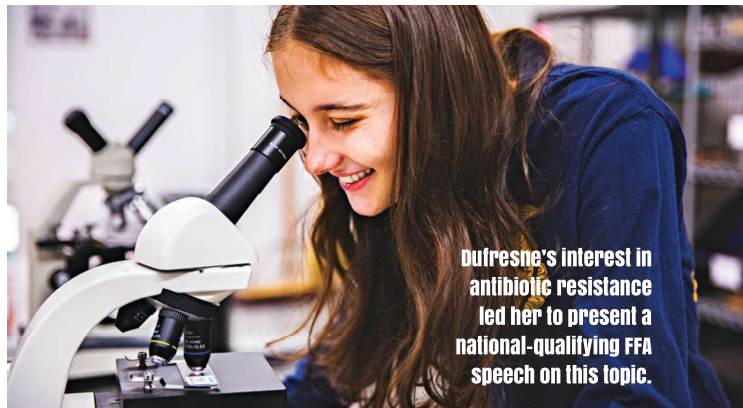
Julianna Dufresne's senior research project includes examining the effects of disinfectants on microbial growth. After graduating from Bristol Aggie this spring, she plans to continue her education at a nearby college and pursue a career in research.

cows in the school's new robotic dairy barn. She has helped dehorn and vaccinate dairy calves against tetanus, clostridial infections and other diseases.

Dufresne's heart was set on becoming a small-animal veterinarian when she first came to Bristol Aggie. However, her hands-on classes made her realize

she wants a career at the intersection of animal science, microbiology and human medicine.

Dufresne plans to pursue a doctorate in virology or immunology, then work for a research company where she can observe the effects of drugs or other human-health treatments on different pathogens in



Dufresne's interest in antibiotic resistance led her to present a national-qualifying FFA speech on this topic.



Visiting the Natural Resource Management (NRM) Museum on Bristol Aggie's campus encouraged Brian Thornhill to apply for, and later attend, the school. Bristol Aggie students, including Thornhill, develop the museum's exhibits as part of their coursework.



As an NRM major, Thornhill helps care for turtle hatchlings raised on Bristol Aggie's campus. The turtles, some of which are native to Massachusetts and surrounding areas, are eventually released into their natural habitat.

“Everything I learn here every single day is going to benefit me in some way in my future career.”

– Julianna Dufresne

research animals, including mice, rats and primates.

“Microbes fascinate me in a way no other topic ever has,” Dufresne says, recalling the time she and classmates performed fecal smears. They looked under the microscope for parasitic eggs from hookworms, roundworms and tapeworms in fecal samples from their school animals.

She recently prepared a speech for FFA that explores the topic of antibiotic resistance, and she is developing a research project that will observe the effects of different disinfectants on microbial growth.

“Everything I learn here every single day is going to benefit me in some way in my future career,” Dufresne says. “All of this experience has given me confidence with animals. I can handle any mouse, any rat or any bird someone puts in front of me, and I can do it with confidence. That will be huge, especially in a doctorate program.”

Real-World Conservation

Brian Thornhill knew he wanted to be a Bristol Aggie when he was in eighth grade. He had just visited the

school's Natural Resource Management (NRM) Museum during the annual fall show, which draws more than 5,000 visitors each year.

The taxidermy, snake and reptile exhibits were cool, Thornhill says, but he was enthralled by a student showing the differences between two types of arachnids: spiders and harvestmen.

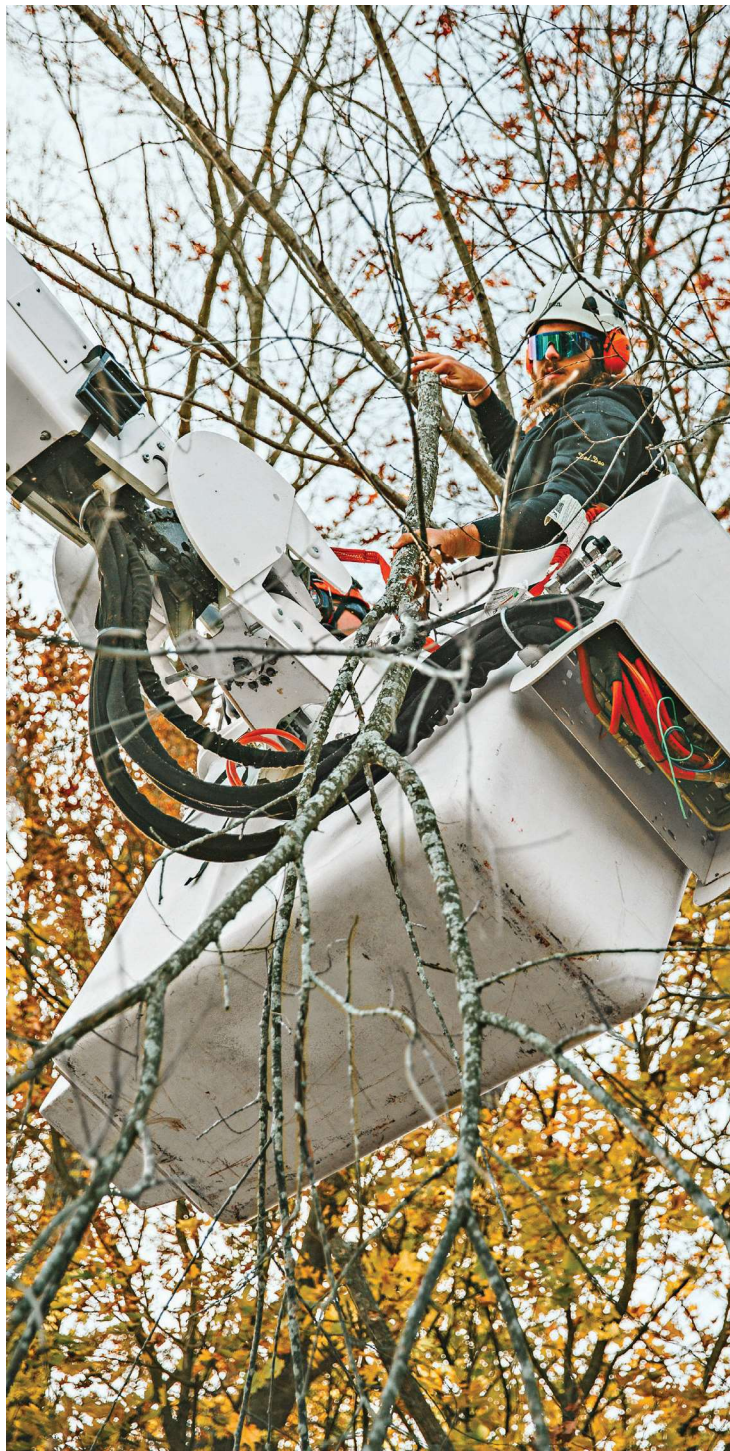
“He was explaining those [harvestmen] technically aren't spiders,” Thornhill recalls. “I love creepy crawlies, and that's what completely sold me. That's when I said, ‘I have to go to this school.’”

Thornhill is now a senior NRM major teaching juniors how to run turtle tanks at the museum. As an NRM student, he learns about how ecosystems work and the roles of different groups of animals in them. Students work closely with academic and professional partners, including wildlife biologists at the University of Georgia, the state and federal departments of wildlife and fisheries, and Oxbow Associates, a private company.

Through these partnerships, students receive rare, endangered turtle hatchlings or eggs, which they hatch in school and care for over the winter. They release the turtles into their natural habitat in the spring, with hopes of boosting populations.

Recently, the students have begun monitoring red herring populations in the Taunton River, which runs alongside the campus. They learn how to keep their lab environments biosecure and to present their findings professionally at scientific conferences.

Thornhill wants to “keep doing NRM things” in the future, perhaps teaching at a



Brody Del Deo and his arboriculture instructor, Seth Cook, climb into the arboriculture department's bucket truck to perform maintenance on a tree located on Bristol Aggie's campus.



college or working for the state.
 "I think this is definitely laying the foundation," he says.

In the Trees

Brody Del Deo felt nervous climbing his first tree as a sophomore. He had learned proper safety protocols. He was hooked into a harness. But it was the encouragement from his classmates and instructors that helped him overcome

his fear of heights.

As a senior arboriculture major, Del Deo now considers tree climbing one of the best parts of school. He and his classmates learn how to diagnose diseases and other issues in trees and how to make them more aesthetically pleasing. Then they practice pruning, planting and, when necessary, removing trees on campus. They learn

to use the same tools and equipment, such as chain saws and bucket trucks, as professionals.

"I really like the hands-on work," Del Deo says. "It helps me learn better than sitting in the classroom."

When Del Deo transferred into Bristol Aggie, he chose the arboriculture major because he knew he wanted to work outdoors. He already had experience in

landscaping, so he decided to try something new.

"Arboriculture opened my eyes," Del Deo says. "I didn't realize there were so many opportunities for working outside every day."

Last spring, Del Deo climbed a Norway maple tree — ascending 30 to 40 feet — to prune it. It was the first time he had done so mostly on his own.

"It showed me how I



In 2022, Bristol County Agricultural High School, commonly referred to as Bristol Aggie, underwent a \$105 million expansion. Today, the 220-acre campus is nestled near the Taunton River in Pighton, Mass. After being selected from a competitive applicant pool, some students travel more than two hours each way to attend classes at the school.

opposite: All seven majors at Bristol Aggie, including arboriculture, place an emphasis on experiential learning. In his program, Brody Del Deo has gained skills such as tree identification, pruning, removal and climbing.

would be doing it working in the industry,” Del Deo says. He wants to jump right into production arboriculture after high school.

The hands-on education at Bristol Aggie is beneficial,

he adds, but the best part is the community.

“You find a group of people who share similar interests,” he says. “It makes coming to school enjoyable every day.”

Cultivating Career Readiness

Watch and see how Bristol County FFA members prepare for their futures.



More Space to Learn

Bristol County Agricultural High School features 220 acres of learning space, both in the classroom and outside – in barns, pasture, an agricultural mechanics shop, greenhouses, a vet clinic, a museum, the campus grounds and on the Taunton River.

In 2022, the school completed a \$105 million expansion that built and/or updated six buildings.

- The new **Center for Science and the Environment** houses the student-curated Natural Resource Management Museum, specialized biosecure labs and flexible classrooms.
- The new **Student Commons** features a dining area and a media center.
- Renovations and a small addition to **Gilbert Hall** include administration offices, classrooms, two gymnasiums and a climbing lab for arboriculture students.
- A new **Landscape/Arbor Building**.
- A renovated **Ag Mechanics Building** with welding, diesel mechanics and electricity labs.
- A new **Net-Zero Dairy Barn** with robotic milking technology.

Sustainable design elements such as composting toilets and vegetative roofs were also incorporated to conserve water and energy. The expansion creates spaces for 640 students to experience hands-on agricultural education, which is up from 450 students in years' past.



Name: _____

Aligned to the following standards: CS.05; AG5; AGC09.02; CRP.02, CRP.07; CRP.08; CRP.10; CRP.11; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PG-I; FFA.CS-N; FFA.CS-P; CCSS.RI.9-10.1; CCSS.W.9-10.2; CCSS.W.9-10.7; CCSS.W.9-10.9

Appendix 6: Hands-On Education

Part 1

Directions:

Read the article “Hands-On Education” in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. In the space below, draw a timeline to show the history of Bristol Aggies. On the timeline, tell what happened in each of the following years: 1912, 1936, 1960, 2024.
2. Why do you think the Massachusetts Legislature started Bristol Aggie?
3. Why do you think the school only accepted boys in the beginning?
4. How many acres is the Bristol Aggie campus?
5. List the seven majors that Bristol Aggie offers:
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.
 - 7.
6. Describe a typical school day at Bristol Aggie:



Name: _____

Julianna's Story

7. Circle the animals that Julianna oversees the care of:
Horse Rabbit Pig Bird Mice Snake Rat Guinea Pig
8. Which concentration in the animal science department is Julianna part of?
9. Although Julianna works mostly with small animals, describe one way she also works with large animals on campus.
10. Julianna is interested in a career at the intersection of animal science, microbiology and human medicine. Describe her career goals.
11. What is Julianna's upcoming research project focused on?



Brian's Story

12. What did Brian see at the Bristol Aggie Fall Show that encouraged him to apply to Bristol Aggie?
13. What is Brian's job at Bristol Aggie as a senior NRM major?
14. What happens in the endangered turtle hatching project at Bristol Aggie?
15. Name two partners that help Bristol Aggie with this project.



Brody's Story

16. What is Brody's major at Bristol Aggie?
17. What is Brody learning in this major?
18. To practice pruning, planting and removing trees from campus, what tools and equipment do Bristol Aggie students use?
19. Why did Brody choose his major?



Name: _____

20. What are two things Brody says are beneficial at Bristol Aggie?



Name: _____

Part 2

Directions:

Use the appropriate links below to complete career profiles about three agricultural careers that related to the three Bristol Aggie students in the article.

1. Explore the research and development manager career information found at AgExplorer.FFA.org/career/research-and-development-manager/.

RESEARCH AND DEVELOPMENT MANAGER	
BRIEFLY DESCRIBE THIS CAREER:	AVERAGE SALARY:
LIST THREE RESPONSIBILITIES THIS CAREER INVOLVES: • • •	
WHAT EDUCATION OR TRAINING IS NEEDED?	

Would this career be a good match for Julianna from the article? Why or why not?

Name: _____

2. Explore the wildlife biologist career information found at AgExplorer.FFA.org/career/wildlife-biologist/.

WILDLIFE BIOLOGIST

BRIEFLY DESCRIBE THIS CAREER:

AVERAGE SALARY:

LIST THREE RESPONSIBILITIES THIS CAREER INVOLVES:

-
-
-

WHAT EDUCATION OR TRAINING IS NEEDED?



Would this career be a good match for Brian from the article? Why or why not?

Name: _____

3. Explore the arborist career information found at AgExplorer.FFA.org/career/arborist/.

<u>ARBORIST</u>	
BRIEFLY DESCRIBE THIS CAREER:	AVERAGE SALARY:
LIST THREE RESPONSIBILITIES THIS CAREER INVOLVES:	
• • •	
WHAT EDUCATION OR TRAINING IS NEEDED?	

An illustration of an arborist, a person who works with trees, using a chainsaw to cut a tree. The arborist is wearing a yellow hard hat, a white long-sleeved shirt, red pants, and yellow boots. They are also wearing a safety harness. The arborist is standing on a blue circular base and is cutting a brown tree trunk. The background is a light blue sky with a yellow sun. The entire illustration is enclosed in a red and blue striped border.

Would this career be a good match for Brody from the article? Why or why not?

Aligned to the following standards: FFA.PL-A, CCSS.ELA.W.9-10.2, CCSS.ELA.W.9-10.3, CCSS.ELA.W.9-10.4, CCSS.ELA.SL.9-10.1, CCSS.ELA.SL.9-10.2, CRP.04., CRP.006.,

Name: _____

Part 2

Directions:

Review your short story and select one vocabulary word that you used. In the space below, create an illustration of that vocabulary word.

Vocabulary word illustrated:

ANSWER KEYS

Name: _____

Aligned to the following standards: CS.01., FFA.PL-A, FFA.PL- E, FFA. CS- M, FFA.PL-F, FFA.PG-I., CCSS.ELA.WHST.9.1.6, CCSS.ELA.W.9-10.2, CCSS.ELA.SL.9-10.2, CCSS.ELA.SL.9-10.4, AG1, CRP.02., CRP.04., CPR. 07., CPR. 11.

KEY: Appendix 1: Try Something New With Your SAE

Part 1

Directions:

Read the article “Try Something New With Your SAE” in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. Color the state where the Frederick FFA Chapter is located.



Frederick, Maryland

2. What type of SAE did Kaitlyn Baker have?

Agricultural Communications SAE

3. FFA With Kay began with a [Google document of ideas](#), an [Instagram account](#) and the encouragement of her [FFA advisor](#), Richard Stonebraker.
4. What is the title of Baker's podcast?

FFA with Kay

5. What were the three questions Baker answers in her podcasts?
 - What is the organization all about?
 - What is a program of activities (POA)?
 - How do you wear Official Dress, and in what order do the pins go on your FFA jacket?
6. How can you add an agricultural communications component to your SAE?



Answers will vary.

Name: _____

Part 2

Directions:

Before creating any agricultural communications platform, you need to develop a brand. A brand is used to separate your organization from others. Use this worksheet as a guide to create your marketing brand.

1. What platform are you going to create? (Ex. podcast, YouTube channel, social media page, news, journal article)

Answers will vary.

2. Which audiences are you primarily targeting? In other words, which audiences do you want to build a relationship with?

Answers will vary.

3. Define your brand: What is your mission or the values you want to communicate? What is your goal or vision for your brand?
 - a. Mission/Values: (a brief, broad statement about an organization's goals and how it intends to meet those goals)

Answers will vary.

- b. Vision: (describes where an organization is going and what it will look like when it gets there)

Answers will vary.

4. Develop visual brand consistency. (Brand consistency ensures the way you present your organization and what it stands for remains the same across all your marketing platforms.)
 - a. Fonts:

Answers will vary.

- b. Branding colors:

Answers will vary.

- c. Logo drafts:

Answers will vary.

Name: _____

Part 3

Directions:

After completing Part 2, think about how you could do an agricultural communications SAE. If you choose to do a podcast or YouTube channel, complete Option A. If you choose to do a social media account, complete Option B. If you choose to do a news or journal article, complete Option C.

Option A: Episode Pitch

1. Proposed Episode Title:

Answers will vary.

Overview

Provide a 100- to 300-word summary of your episode idea. In doing so, answer the following questions:

- What is the topic/theme of your episode?
- If your episode has subthemes or topics, list those.
- Who is your target audience?
- Why are they going to be interested in this topic?
- How will these episodes keep people engaged?

Answers will vary.

Format

Provide an overview of the format of your proposed episode.

- Does your episode have a set structure? If so, what will that be?
- Will your episode include additional guests? If so, who and why.
- Will your episode include additional audio (music/effects)? If so, why?

Answers will vary.

Research Learning Examples

Provide links to three podcasts or YouTube episodes that you can use as examples to learn from. For each example episode, provide a short (less than 100 words) statement as to why that example episode will help you construct your own episode. These episodes should have some elements of style or format that you wish to incorporate in your own episode.

Answers will vary.

Name: _____

Option B: Social Media Pitch

1. Proposed Social Media Name:

Answers will vary.

Overview

Provide a 100- to 300-word summary of your social media idea. In doing so, answer the following questions:

-What is the topic/theme of your account and posts?

-If your account has subthemes or topics, list those.

-Who is your target audience?

-Why are they going to be interested in this topic?

-How will these posts keep people engaged?

Answers will vary.

Creation of social media posts with explanations.

Provide an overview of the first three posts on your proposed social media account.

- *Using a design platform (Canva, Google Slides, PowerPoint, etc.), create the graphics you will use for your social media posts.*
- *In the space provided below, please include the graphics, the content and the purpose of each post.*

Answers will vary.

Research Learning Examples

Provide links to three social media accounts that you can use as examples to learn from. For each example, provide a short (less than 100 words) statement as to why that account will help you construct your own posts. These accounts should have some elements of style or format that you wish to incorporate in your own account.

Answers will vary.

Name: _____

Option C: Article Pitch

1. Article Title:

Answers will vary.

Overview

Provide a 100- to 300-word summary of your article. In doing so, answer the following questions:

- What is a current event in the industry?
- Who is your target audience?
- Why are they going to be interested in this topic?
- How will these articles keep people engaged?

Answers will vary.

Format

Provide an overview of the format of your article.

-Introduction: Answers will vary.

-Body:

1. Answers will vary.
2. Answers will vary.
3. Answers will vary.

-Conclusion: Answers will vary.

Research Learning Examples

Provide links to three journal or news articles that you can use as examples to learn from. For each article, provide a short (less than 100 words) statement as to why that example will help you construct your own article.

Answers will vary.

Name: _____

KEY: Appendix 2: Paving a Path Forward

Part 1

Directions:

Read the article “Paving a Path Forward” in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. Who is Corey Flournoy?

He was the first African-American National FFA president.

2. What year was the first African-American National FFA president elected?

- a. 1993
- b. 1994
- c. 1995
- d. 1996

3. What company was co-founded by Flournoy in 1996?

Creative Outreach Consulting

4. What does this company do?

They deliver 360-degree holistic approaches to individual and organizational transformative change through proven practices; programs and processes in leadership development; personal coaching; and diversity, equity and inclusion.

5. What is Flournoy's ultimate goal?

To help ensure all students in FFA feel welcomed, no matter who they are, where they come from or how they identify.

6. At which national convention was Flournoy a keynote speaker?

- a) 93rd
- b) 94th
- c) 95th
- d) 96th
- e) None of the above

7. Flournoy encouraged members to “challenge themselves to look beyond their biases and fears and get out of their comfort zones and intentionally engage with people they may perceive as different.” Give one example of how you plan to do this.

Answers will vary.

Name: _____

Part 2

Directions:

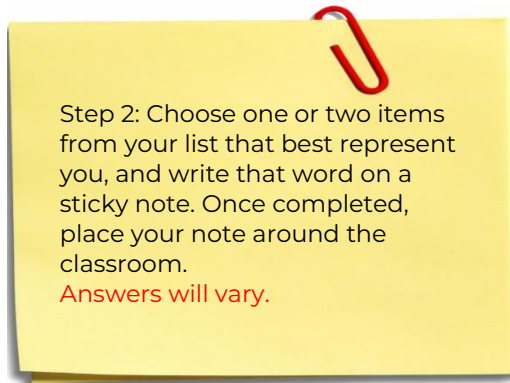
Diversity includes a range of people from various backgrounds. For this activity, you will need to make a list of characteristics that make you who you are. (Ex. age, education, ethnicity and national origin, gender and gender identity, lifestyles, experiences, etc.)

1. Answers will vary.

Potential Ideas:

- o age, race, gender, ethnicity, mental and physical abilities, sexual orientation, nationality, education, income, religion, work experience, language skills, geographic location, family status, communication style, military experience, learning style, economic background, and work style

- 2.



3. Discuss the differences and similarities found around the classroom, and list a few characteristics that differ from yours. After listing differences, please provide a brief explanation on why diversity is important in classroom settings.

Answers will vary.

Name: _____

Part 3

Directions:

Choose a word from the word bank that is related to equity, diversity and inclusion, and write an acrostic poem using that word. To create an acrostic poem, write your selected word vertically in the area below. You will then generate a short phrase or sentence that begins with each letter of the vertical word. This phrase or sentence should be related to the word you selected.

Word bank:

Belonging, Culture, Diversity, Diverse, Different, Equal, Equity, Inclusion, Inclusive, Valued, Welcoming

Example:

F- For students looking for premier leadership, personal growth and career success through agricultural education

F- Farming is one of many career choices that members choose.

A- Agriculture classes are required for FFA members.

Answers will vary.

Example:

D- Diversity looks like everyone.

I- Inclusion is the practice of including people from diverse backgrounds.

V- Varying ideas, perspectives and backgrounds contribute to diversity.

E- Education is a characteristic of diversity.

R- Race is a characteristic of diversity.

S- Strength lies in differences, not in similarities.

E- Everyone can contribute to a diverse setting.

Name: _____

Aligned to the following standards: CS.01; CS.02; FFA.PL-A; FFA.CS.M; CCSS.ELA.RI.9-10.1; CCSS.ELA.RI.9-10.4; MP2; CCSS.ELA.W.9-10.1; CCSS.ELA.W.9-10.2; CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2; CCSS.ELA.SL.9-10.4; AG1; AG2; CRP.02; CRP.04; CRP.05; CRP.06; AGC10.03;

KEY: Appendix 3: Ag 101: The Farm Bill

Part 1

Directions:

Read the article "Ag 101: The Farm Bill" in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. What is the U.S. farm bill, and why is it currently a topic of discussion in agriculture?

The U.S. farm bill is a significant piece of legislation that covers various agriculture, food and rural programs. It is currently a topic of discussion because the previous farm bill expired in October 2023, prompting the need for a new and updated version.

2. Describe the legislative process of the U.S. farm bill from committee debates to becoming law.

The bill begins in the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition and Forestry and is debated within each committee. After committee debates, the farm bill moves to the House and Senate floors, where amendments can be offered. Once passed by both chambers, it needs to be signed by the president before becoming law.

3. How often are the provisions of the farm bill amended, reauthorized or repealed? Why is this time frame significant in the farm bill process?

The provisions of the farm bill are reviewed every five years. The five-year time frame allows lawmakers to regularly reassess and update policies to align with the evolving needs and conditions of the agriculture industry.

4. What are the 12 topics (titles) covered in the farm bill?

1. Commodities
2. Conservation
3. Trade
4. Nutrition
5. Credit
6. Rural Development
7. Research, Extension and Related Matters
8. Forestry
9. Energy
10. Horticulture
11. Crop Insurance
12. Miscellaneous

5. Describe the impact the farm bill has on the agriculture industry.

The farm bill sets the framework for food and agriculture policy, impacting the industry not only in the short term but also for an extended period, shaping policies for years to come.



Name: _____

Part 2

Directions:

As assigned by your teacher, research one of the 12 titles in the United States Farm Bill. Then, using the provided handout, create your portion of the class's Farm Bill 101 poster. You must include the information from the questions below, but you can also include any other information you discover that is relevant to your assigned title. Be sure to include at least **one image** as well!

Some of the following sites may be helpful to you in your research:

- USDA, Farm Bill: <https://www.usda.gov/farmbill>
- American Farm Bureau Federation, What Is the (Food and) Farm Bill and Why Does It Matter?: <https://www.fb.org/market-intel/what-is-the-food-and-farm-bill-and-why-does-it-matter>
- Farm Aid, Farm Bill 101: <https://www.farmaid.org/issues/farm-policy/farm-bill-101/>

1. Describe the purpose of this title in one or two sentences.

Answers will vary depending on assigned title.

2. What kinds of programs are included within this title?

Answers will vary depending on assigned title.

3. Who is mainly affected by this title?

Answers will vary depending on assigned title.

4. How much money was allocated to this title in the most recent farm bill?

Answers will vary depending on assigned title.

5. Record any other information about this title that you'd like to include on the poster:

Answers will vary depending on assigned title.

Once all the pages are completed for each title, assemble all 12 title pages together along with the Farm Bill 101 cover page and process explanation page to create your class's Farm Bill 101 poster.

Name: _____

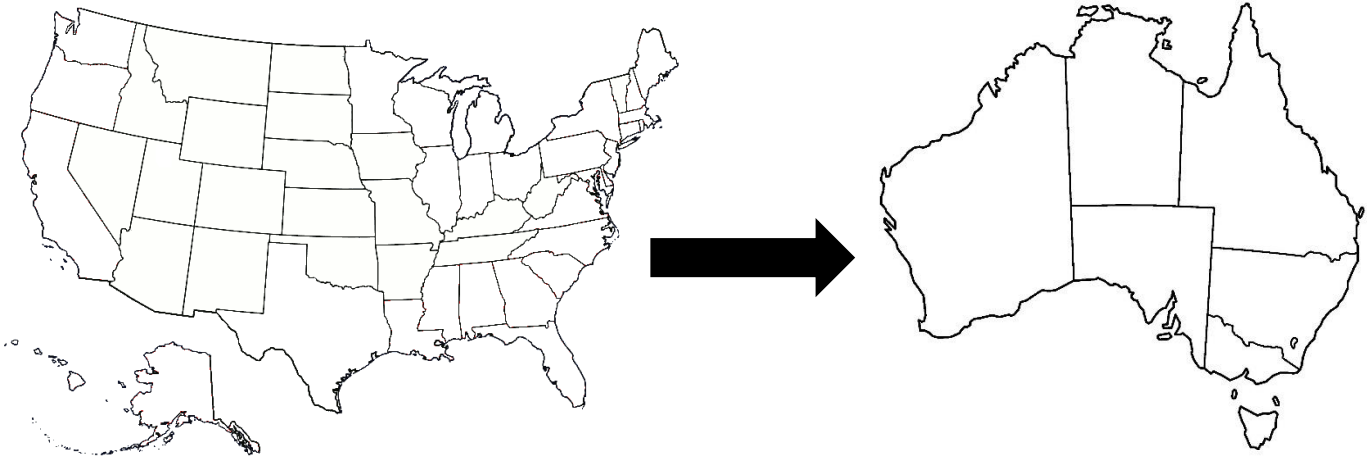
7. During his sophomore year in college, which team did Casey join?

- A. Livestock Evaluation Team
- B. Livestock Showing Team
- C. Meats Judging Team
- D. Meat Grilling Team

8. Label the countries shown below where Casey has competed with his college:

United States

Australia



9. While competing in Australia, what happened to Casey?

His skills caught the attention of local ag industry professionals, and he received offers to work on cattle ranches and with an international beef distributor.

10. When did Casey earn his American FFA Degree?

November 2023

11. Based on this article, name two potential supervised agricultural experiences (SAEs) that you think Casey used on his American FFA Degree application:
(Learn more about SAEs here, <https://saeforall.org/>.)

Possible answers include showing livestock, his farrier business, working on a beef cattle ranch, meats judging team member

12. Who does Casey say helped him build his confidence and explore agriculture more?

His advisors

Name: _____

Part 2

Directions:

Using the American Meat Science Association website (<https://meatscience.org/students/meat-judging-program>), answer the questions below.

1. The Intercollegiate Meat Judging Program (IMJP) started in which year?

- A. 1969
- B. 1926
- C. 1990
- D. 1928

2. Where did the Intercollegiate Meat Judging Program start?

The International Livestock Exposition in Chicago

3. Contests for the IMJP have been held every year since it started, except 1942-1945. Why was it not held in those years?

World War II prevented it

4. Today, there are six contests.

List them:

- National Western
- Southwestern
- Eastern National
- Cargill High Plains
- American Royal
- The International

5. Meat judging programs are an effective tool for what?

The recruitment and development of future meat science technologists in existence today

6. Fill in the blanks on how participating on a meat judging team can benefit someone:

- Learn how to determine the **quality** of meat
- Learn how to determine the **lean** meat yield of a carcass or wholesale cut
- Serves as a **training** tool for youth and college students
- The deep-rooted **history** of the meat industry

Scroll to the bottom of the page. There is a section that has logos from sponsors. Choose one logo and click on it. Browse the website for that sponsor. Below, explain in your own words why you think this company is sponsoring the Intercollegiate Meat Judging Program. Think of what benefit this company could receive.

Answers will vary.

Name: _____

Part 3

Directions:

Getting started in meat judging requires basic knowledge of where retail cuts of meat come from. Use the Certified Angus Beef site to help you with this activity: <https://www.certifiedangusbeef.com/cuts/>.

Below is a beef steer with sections marked to help you learn where retail cuts of meat come from. For each section, draw a line to the empty space around the steer and list two retail cuts of meat from that section.

Round: rump roast, top round London broil, top round roast, top round steak, bottom round steak, bottom round London broil, bottom round roast, eye of round roast, eye of round steak, sirloin tip center roast, sirloin tip center steak, sirloin tip side steak, butterfly top round steak

Loin: boneless strip steak, strip filet, strip roast, tenderloin roast, T-bone, porterhouse, filet mignon, hanger steak, center cut sirloin steak, top sirloin steak, coulotte steak, sirloin filet, tri-tip steak, tri-tip, ball tip steak, ball tip, sirloin flap

Rib: ribeye, bone-in rib roast, rib filet, ribeye roast, cowboy steak, bone-in ribeye, bone-in plate short ribs, back ribs, chef cut ribeye

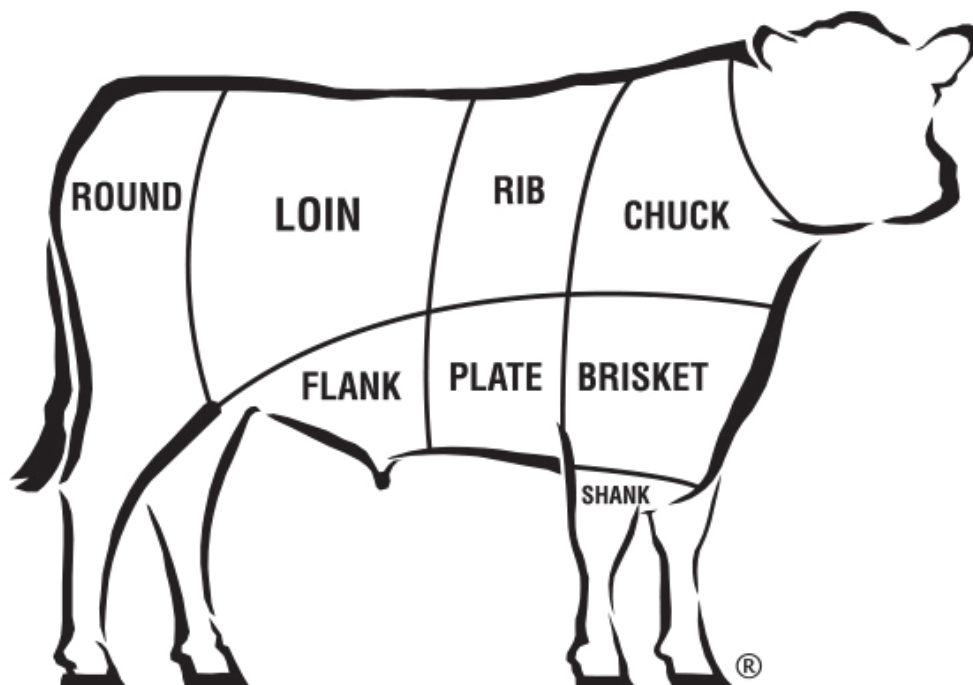
Chuck: flat iron, top blade steak, chuck roast, chuck arm roast, mock tender steak, mock tender, clod heart, ranch steak, petite tender, shoulder tender medallions, cross rib roast, English roast, Sierra steak, Denver steak, boneless country style ribs, bone-in chuck short ribs, chuck eye steak, chuck eye roast

Brisket: whole brisket, brisket flat, brisket point

Shank: shank cross cut

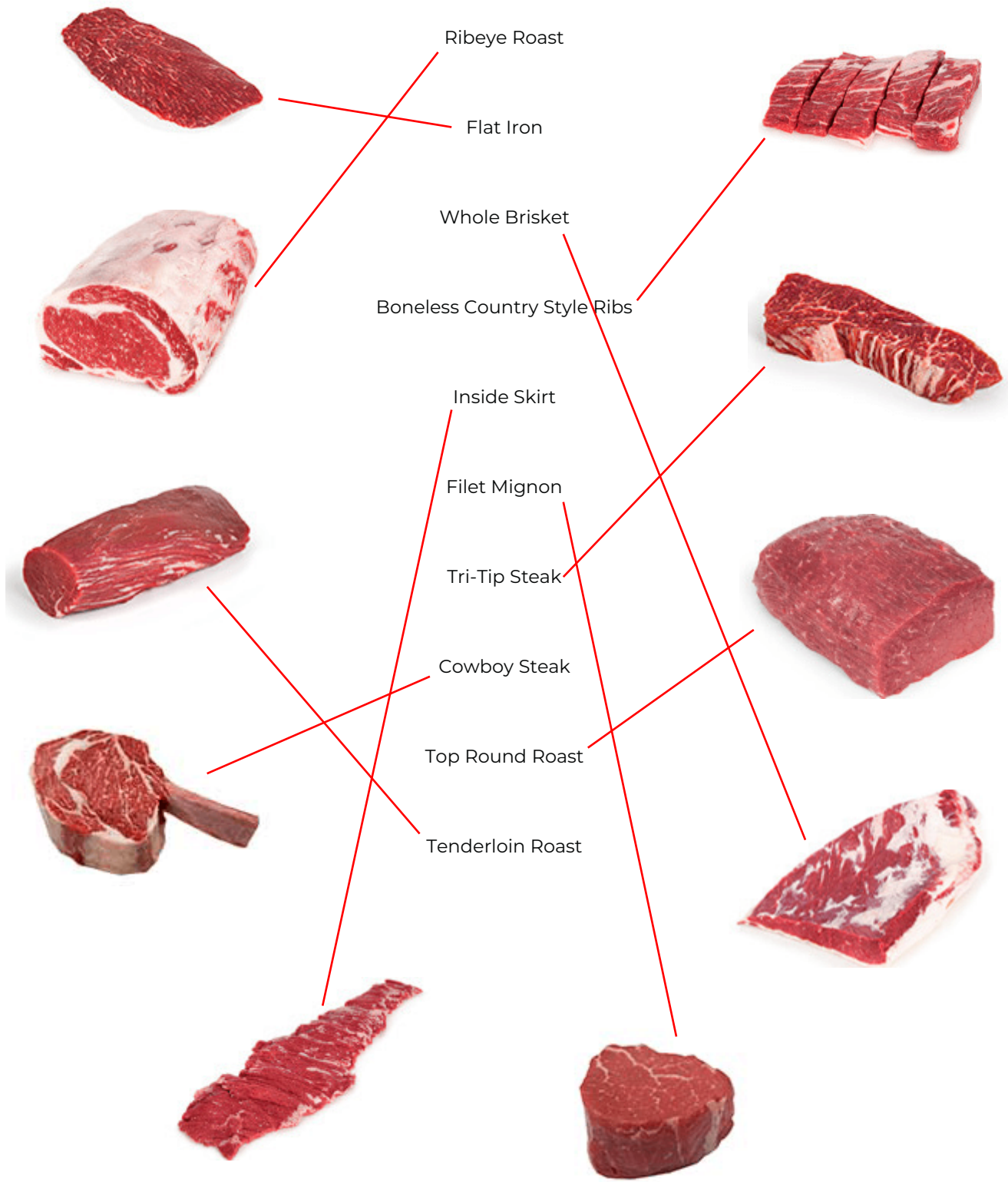
Plate: short ribs, inside skirt

Flank: flank



Name: _____

Now, using the same website as the previous activity, match the beef retail cut with its correct name.



Name: _____

Aligned to the following standards: CS.01; CS.05; FFA.PLA; FFA.PL.C; FFA.PL.F; FFA.PG.I; FFA.CS.N; CCSS.ELA.RI.9-10.1; CCSS.ELA.RI.9-10.4; MP2; MP6; CCSS.ELA.W.9-10.2; AG1; AG5; CRP.02; CRP.06; CRP.08; AGC08.01; AGC09.02;

KEY: Appendix 5: Wired for Growth

Part 1

Directions:

Read the article “Wired for Growth” in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. What sparked Evan Vander Stoep’s interest in reviving the fodder greenhouse system at Milwaukie High School?

He was motivated by the state of disrepair of the fodder greenhouse system at Milwaukie High School, and he saw it as a challenge to get it working again.



2. How did Evan’s advisor, Kathy Mayfield, initially perceive his efforts to fix the greenhouse system?

Initially, she was skeptical and questioned whether Evan knew what he was doing.

3. How many pounds of fodder do the animals at the North Clackamas FFA Chapter eat per day? How many pounds per week would that be?

The animals eat 400 pounds of fodder per day.

$400 \times 7 = 2,800$ pounds per week

4. Describe the controlled-environment agriculture fodder system introduced by Mayfield. What was its primary goal?

Mayfield introduced vertical racks and a flood-and-drain system into their 20x40-foot greenhouse for controlled-environment agriculture, aiming to grow a significant amount of feed in a small space at a rapid pace, teaching students about crop production for animals.

5. What were the benefits of switching from the initial flood-and-drain system to the mister system? How did the chapter discover this and make the decision to switch?

There was less seed washout, decreased mold levels and increased production. The North Clackamas FFA Chapter arrived at this type of system after FFA members conducted an agriscience project in 2014 comparing the performance of the flood-and-drain system with the mister system.

6. Who helped to support Evan’s efforts to revive the fodder system?

Evan has support from Kathy Mayfield, his FFA advisor, and Chris Guntermann, a local greenhouse specialist.

Name: _____

7. Describe Evan's process of fixing up and tweaking the system's designs.

Evan spent all his spare time working on the system. He would assemble test configurations and ran trials of seeding, harvesting and reseeding. This process took more than two hours per day. He kept making small tweaks to his designs moving the irrigation valves from the floor to the ceiling and installing a programable logic controller for the irrigation system and to manage the humidity in the greenhouse. He continued to run tests and make adjustments to the system to meet his and Ms. Mayfield's production goals.

8. What kinds of skills did he have to learn and use throughout the process of reviving the fodder production system?

He used skills in system design, electrical, plumbing and code-writing for the controller. He also had to rely a lot on his problem-solving skills in his trial and error.

9. How did Evan experiment with seed soaking, and what significant findings did he discover regarding the impact of water temperature on seed soaking?

He would soak some of the seeds in buckets with regular hose water (50°F) and then used an aquarium heater to control the water temperature in other buckets to collect data on different temperature ranges.

He found that there were peak production rates when the seeds were soaked in the 72-75°F range and that temperatures above 80°F were too high and caused seed degradation and lower production rates.

10. What is Evan doing now? What parallels does he draw to his work on reviving the fodder system?

He graduated in 2023 and accepted a position as a radio tower technician. He travels around the country repairing and installing technical equipment, which sometimes requires climbing hundreds of feet into the air to work on the tower's antennas and lights.

Similar to redesigning the irrigation system for the barley fodder operation, repairing radio towers requires top-notch technical and problem-solving skills.



I have a creative side; I like to come up with new ideas and design custom components. I want to put those passions to use to continue down the ag path; it's something I'm interested in and passionate about.

—Evan Vander Stoep



Name: _____

Part 2

Directions:

Evan Vander Stoep saw a need and a potential project in his school's agriculture program and took action. There are endless opportunities for growth in our schools and communities. Now it's your turn; using this activity sheet, identify a potential project based on a need in your school's agriculture program or FFA chapter and make a plan for how you could tackle that challenge.

Project Title: <i>Answers will vary.</i>	
Description of Need/Opportunity (Scope): <i>(four or five sentences)</i> <i>Answers will vary.</i>	
Project Outcomes: <i>(List at least three specific outcomes for your project (i.e., What will it look like when you're done?).</i> 1. <i>Answers will vary.</i> 2. <i>Answers will vary.</i> 3. <i>Answers will vary.</i>	
Materials and/or Skills Needed: <i>(List at least five specific things.)</i> 1. <i>Answers will vary.</i> 2. <i>Answers will vary.</i> 3. <i>Answers will vary.</i> 4. <i>Answers will vary.</i> 5. <i>Answers will vary.</i>	Project Supporters: <i>(Think of at least two individuals who can support your efforts. List their names and how they can help.)</i> 1. <i>Answers will vary.</i> 2. <i>Answers will vary.</i>

Name: _____

SMART Goal 1

(Write a goal for the project using the SMART formula.)

SMART Goals: Specific, Measurable, Attainable, Relevant, Time-Bound

Answers will vary.

SMART Goal 2

(Write a goal for the project using the SMART formula.)

SMART Goals: Specific, Measurable, Attainable, Relevant, Time-Bound

Answers will vary.

Timeline:

(Brainstorm at least three specific milestones for your project.)

1. Answers will vary.

2. Answers will vary.

3. Answers will vary.

Questions:

(List at least three specific questions you have about this project that you can ask your agriculture teacher.)

1. Answers will vary.

2. Answers will vary.

3. Answers will vary.

1. Why did you choose this project? What is your interest in it?

Answers will vary.

2. How will completing this project help you with your future goals?

Answers will vary.

Name: _____

KEY: Appendix 6: Hands-On Education

Part 1

Directions:

Read the article "Hands-On Education" in the spring/summer 2024 issue of *FFA New Horizons* and answer the questions below.

1. In the space below, draw a timeline to show the history of Bristol Aggies. On the timeline, tell what happened in each of the following years: 1912, 1936, 1960, 2024.

Answers will vary, but should include the following:

- 1912: Bristol Aggie started, created for boys only, taught them how to be farmers
- 1936: First female student, Elizabeth Bowen
- 1960s: Girls allowed to attend
- 2024: Over 220 acres at the school and seven agricultural majors, has students from 16 different towns and four cities in Bristol County

2. Why do you think the Massachusetts Legislature started Bristol Aggie?

Answers will vary, but should include that the school helps teach students how to become better farmers.

3. Why do you think the school only accepted boys in the beginning?

Answers will vary.

4. How many acres is the Bristol Aggie campus?

Over 220 acres

5. List the seven majors that Bristol Aggie offers:

1. Agricultural mechanics
2. Animal science
3. Arboriculture
4. Floriculture
5. Landscape design and contracting
6. Natural resource management
7. Environmental engineering

6. Describe a typical school day at Bristol Aggie:

Half the day is spent studying academics and the other half is focused on vocational training, in and outside of the classroom.



Name: _____

Julianna's Story

7. Circle the animals that Julianna oversees the care of:

Horse Rabbit Pig Bird Mice Snake Rat Guinea Pig

8. Which concentration in the animal science department is Julianna part of?

The veterinary science and laboratory animal technology concentration

9. Although Julianna works mostly with small animals, describe one way she also works with large animals on campus.

She occasionally works in the school's new robotic dairy barn, helps with the horses, pigs and cattle, and helps dehorn and vaccinate dairy calves

10. Julianna is interested in a career at the intersection of animal science, microbiology and human medicine. Describe her career goals:

She wants to pursue a doctorate in virology or immunology, then work for a research company where she can observe the effects of drugs or other human-health treatments on different pathogens in research animals.

11. What is Julianna's upcoming research project focused on?

She will observe the effects of different disinfectants on microbial growth.

Brian's Story

12. What did Brian see at the Bristol Aggie Fall Show that encouraged him to apply to Bristol Aggie?

He visited the Natural Resource Management Museum and saw taxidermy, snake and reptile exhibits and arachnids.

13. What is Brian's job at Bristol Aggie as a senior NRM major?

He is teaching juniors how to run turtle tanks at the museum.

14. What happens in the endangered turtle hatching project at Bristol Aggie?

The eggs will hatch at school, and students will care for them over the winter, then they release the turtles into their natural habitat in the spring with hopes of boosting populations.

15. Name two partners that help Bristol Aggie with this project.

Wildlife biologists at the University of Georgia, the state and federal departments of wildlife and fisheries and a private company called Oxbow Associates

Brody's Story

16. What is Brody's major at Bristol Aggie?

Arboriculture

17. What is Brody learning in this major?

He is learning how to diagnose diseases and other issues in trees and how to make them more aesthetically pleasing.

18. To practice pruning, planting and removing trees from campus, what tools and equipment do Bristol Aggie students use?

They use chainsaws and bucket trucks as well as other tools/equipment that professionals use.

19. Why did Brody choose his major?

Brody really likes hands-on work and working outdoors.



Name: _____

20. What are two things Brody says are beneficial at Bristol Aggie?

The hands-on education and the community



Name: _____

Part 2

Directions:

Use the appropriate links below to complete career profiles about three agricultural careers that related to the three Bristol Aggie students in the article.

1. Explore the research and development manager career information found at AgExplorer.FFA.org/career/research-and-development-manager/.

RESEARCH AND DEVELOPMENT MANAGER	
BRIEFLY DESCRIBE THIS CAREER:	AVERAGE SALARY:
They research activities and develop new agricultural products and processes for companies. This can include in-depth research.	\$149,000
LIST THREE RESPONSIBILITIES THIS CAREER INVOLVES:	
• Answers will vary from the list on the website.	
•	
WHAT EDUCATION OR TRAINING IS NEEDED?	
A master's or doctorate degree in the field in which you are applying your knowledge – agriculture, food science, chemistry, biology, agronomy	

Would this career be a good match for Julianna from the article? Why or why not?

Answers will vary.

Name: _____

2. Explore the wildlife biologist career information found at AgExplorer.FFA.org/career/wildlife-biologist/.

WILDLIFE BIOLOGIST

BRIEFLY DESCRIBE THIS CAREER:

They study and oversee the protection and management of an assigned population of one or several species of animals or plants.

AVERAGE SALARY:

\$58,000

LIST THREE RESPONSIBILITIES THIS CAREER INVOLVES:

-
-
-

Answers will vary from the list on the website.

WHAT EDUCATION OR TRAINING IS NEEDED?

A bachelor's or master's degree in wildlife biology, biology, ecology, environmental science, natural resources, wildlife management, wildlife sciences or a related area



Would this career be a good match for Brian from the article? Why or why not?

Answers will vary.

Name: _____

3. Explore the arborist career information found at AgExplorer.FFA.org/career/arborist/.

<u>ARBORIST</u>	
BRIEFLY DESCRIBE THIS CAREER:	AVERAGE SALARY:
They plant, grow, maintain and remove trees.	\$54,000
LIST THREE RESPONSIBILITIES THIS CAREER INVOLVES:	
- Answers will vary from the list on the website.	
WHAT EDUCATION OR TRAINING IS NEEDED?	
A bachelor's degree in arboriculture, landscape architecture, urban forestry, environmental conservation, plant science, horticulture, biology or a related field	

Would this career be a good match for Brody from the article? Why or why not?

Answers will vary.

Aligned to the following standards: FFA.PL-A, CCSS.ELA.W.9-10.2, CCSS.ELA.W.9-10.3, CCSS.ELA.W.9-10.4, CCSS.ELA.SL.9-10.1, CCSS.ELA.SL.9-10.2, CRP.04., CRP.006.,

Name: _____

Part 2

Directions:

Review your short story and select one vocabulary word that you used. In the space below, create an illustration of that vocabulary word.

Vocabulary word illustrated:

Answers will vary.