



Lesson Plan

SAEs: From Passion to Career

Created: 02/2024 by the National FFA Organization

Description of Lesson: *Eric Moen's SAE combines his passions of wildlife, trapping and educating others. Learn more about how Eric uses dermestid beetles to clean wildlife skulls and educate students in his school.*

Student Learning Objectives:

After completing these activities, students will ...

1. Explore a unique SAE opportunity of cleaning wildlife skulls with dermestid beetles.
2. Identify different types of wildlife skulls.

Suggested Grade Level:

Grades 9 and 10 (This lesson is written so instructors can scale up or down based on class needs.)

Suggested Time: 50 minutes (*Time requirements may vary based upon student understanding and class schedule.)

Resources/References:

1. Video: "Wildlife Production and Management – Eric Moen," <https://vimeo.com/901201718>
2. ENR CDE: <https://FFA.app.box.com/file/290508672427?s=q9jsnjgaqpubrwr33wej0wscc5xqgpcu>

Equipment and Supplies Needed:

1. A copy of the "SAEs: From Passion to Career" worksheet for each student
2. A copy of the "Test Your Skull Skills" worksheet for each student
3. Internet access to play the video in real-time or embed it in a PowerPoint ahead of time

Vocabulary:

1. Dermestid beetles
2. Larvae
3. Trapping

Cross-Curricular Connections:

Science
• Identify different wildlife from their skulls.

Virtual Instruction Ideas:

This entire lesson can be taught virtually. All student handouts can be sent or posted electronically.

Student Activity Sheets:

Direct access to student activity sheets without lesson plan or answer key for easy upload to a learning management system or printing for classwork.

<https://ffa.box.com/s/88gibu4jq0gv74f9lxw5606tz9bj9h42> (Word)

<https://ffa.box.com/s/c7yvdf966376hesg6vtlnmqbpdzdufvi> (PDF)

https://docs.google.com/document/d/1Y2eACQ_OxwFHLawRHWx0fLsqWME-xLFW7_wx5hGXtOc/copy (Google)

These Activities Are Aligned to the Following Standards:

AFNR Performance Element

- CS.05. Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.

FFA Precept

- FFA.PL-C. Vision: Visualize the future and how to get there.
- FFA.PL-E. Awareness: Understand personal vision, mission and goals.
- FFA.PG-I. Professional Growth: Assume responsibility for attaining and improving upon the skills needed for career success.
- FFA.CS-P. Technical/Function Skills in Agriculture: Obtain knowledge and skills needed for a career in agriculture and related industries.

Common Career Technical Core

- AG5 Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources Career Pathways.

NASDCTEc

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

Common Core – Reading: Informational Text

- CCSS.ELA-Literacy.RI.9-10.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).

Common Core – Speaking and Listening

- CCSS.ELA-Literacy.SL.9-10.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

Common Core – Literacy in Science & Technical Subjects: Writing

- CCSS.ELA-Literacy.WHST.9.10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

AFNR Career Ready Practices

- CRP.02. Apply appropriate academic and technical skills. Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive.
- CRP.04. Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.
- CRP.07. Employ valid and reliable research strategies. Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies.

Partnership for 21st Century Skills

- Communication
- Critical Thinking and Problem Solving
- Flexibility and Adaptability
- Initiative and Self-direction
- Leadership

Lesson Plan:

1. **Bell Ringer:** Have students respond to this prompt: What is something you are passionate about? (This could be on the board/screen or could be responded to digitally through a Google form, a JamBoard or other response method for students to see their peers' answers.)
2. **Introduction:** *Have you ever wondered how your passion can lead to an exciting SAE for you to learn vital skills you will use down the road? Today, we are going to look at how Eric Moen turned his passion of hunting and trapping into his SAE of using dermestid beetles to clean off wildlife skulls for educational purposes.*
3. **Activity 1:** Each student needs a copy of the worksheet "SAEs: From Passion to Career."
 - a. Direct students to view the "Wildlife Production and Management SAE" video, <https://vimeo.com/901201718>, to complete Activity 1.
4. **Activity 2:** Each student needs a copy of the worksheet "Test Your Skull Skills."
 - a. Have students use the list of wildlife found on the identification list for the National FFA Environmental and Natural Resources CDE to complete the tasks. (<https://FFA.app.box.com/file/290508672427?s=q9jsnjgagpubrwr33wej0wsc5xqgpcu>)
 - b. Students will choose five wildlife species from this list.
 - c. Students will then find pictures of each species and paste them in the space provided. Have them paste only the top of the picture, so they flip up and you can write on the back of the picture.
 - d. Have students write the name of each species on the backside of each picture.
 - e. Finally, have students swap papers with a partner and see how many species they can identify from their skulls.
 - f. To wrap up the activity, direct students to answer the two discussion questions.
5. **Optional – Extended Learning Opportunities (Not factored into time requirement):**
 - a. Have students share with the class their passions and SAE ideas.
 - b. Have students create an instructional aid for the environmental and natural resources CDE.
6. **Exit Ticket:** How can you turn one of your passions into an SAE?

Name: _____

SAEs: From Passion to Career

Directions:

Answer the questions below as you watch the video “Wildlife Production and Management – Eric Moen,” available at <https://vimeo.com/901201718>.

What is Eric’s SAE?



What types of beetles does Eric use?

What do the beetles do?

What are the steps needed to clean a skull from start to finish?



Where does Eric get the skulls for his SAE?



How did Eric get the resources to start his SAE?

What does Eric do with the skulls when he is done cleaning them?

How has Eric’s SAE grown over time?

Aligned to the following standards:

CS.05.; FFA.PL-C; FFA.PL-E; FFA.PG-I; FFA.CS-P; AG5; AGC08.01; AGC09.02; CCSS.ELA.RI.9-10.4; CCSS.ELA.SL.9-10.1; CCSS.ELA.WHST.9.10.6; CRP.02.; CRP.04; CRP.07

Name: _____

Test Your Skull Skills

Aligned to the following standards:

CS.05.; FFA.PL-C; FFA.PL-E; FFA.PG-I; FFA.CS-P; AG5;
AGC08.01; AGC09.02; CCSS.ELA.RI.9-10.4; CCSS.ELA.SL.9-10.1;
CCSS.ELA.WHST.9.10.6; CRP.02.; CRP.04; CRP.07

Directions:

Eric's SAE has allowed him to take his passion of hunting and trapping and turn that into his SAE. Through his SAE, he has cleaned numerous skulls for identification and educational purposes in his school.

1. Use the list of wildlife found on the identification list for the National FFA Environmental and Natural Resources CDE to complete the following tasks.
(<https://FFA.app.box.com/file/290508672427?s=q9jsnjqaqpubrwr33wej0wscc5xqgpcu>)
 - a. Choose five wildlife species from this list.
 - b. Find pictures of each species and paste them in the space below. Paste only the top of the picture, so they flip up and you can write on the back of the picture.
 - c. Write the name of each species on the backside of each picture.
 - d. Swap papers with a partner and see how many species you can identify from their skulls.
 - e. Answer the discussion questions.

1. Why is identification of wildlife important?

2. How many of your partner's species were you able to accurately identify?

Name: _____

Aligned to the following standards:

CS.05.; FFA.PL-C; FFA.PL-E; FFA.PG-I; FFA.CS-P; AG5;
AGC08.01; AGC09.02; CCSS.ELA.RI.9-10.4; CCSS.ELA.SL.9-
10.1; CCSS.ELA.WHST.9.10.6; CRP.02.; CRP.04; CRP.07

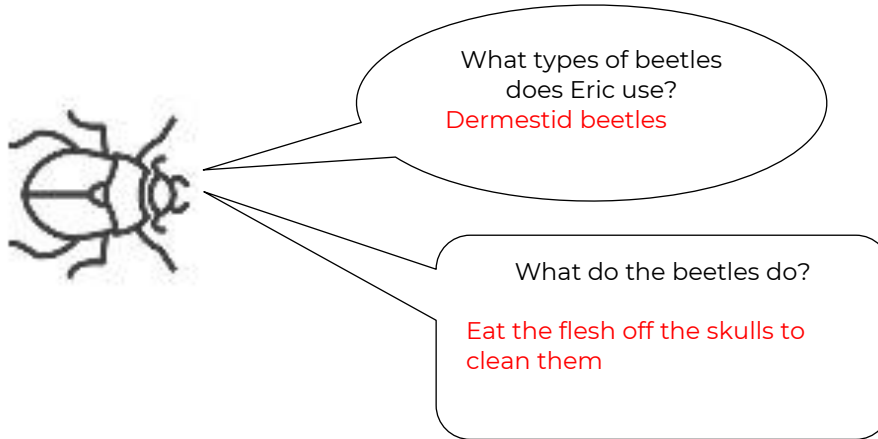
KEY: SAEs: From Passion to Career

Directions:

Answer the questions below as you watch the video "Wildlife Production and Management – Eric Moen," available at <https://vimeo.com/901201718>.

What is Eric's SAE?

Wildlife production and management: He takes wildlife skulls and cleans them with dermestid beetles.



What are the steps needed to clean a skull from start to finish?



Collect wildlife skull.



Have dermestid beetles clean off the skulls.



Boil the skull.



Whiten the skull.

Where does Eric get the skulls for his SAE?



Other FFA chapters



From his own hunting



From his own trapping

How did Eric get the resources to start his SAE?

He received the needed supplies from his FFA chapter.

What does Eric do with the skulls when he is done cleaning them?

He uses the skulls in classes to teach students about identification.

How has Eric's SAE grown over time?

He started out by trapping wildlife, then went slowly into the beetles. He then combined trapping with the beetles to create his SAE.

Name: _____

Aligned to the following standards:

CS.05.; FFA.PL-C; FFA.PL-E; FFA.PG-I; FFA.CS-P; AG5; AGC08.01;
AGC09.02; CCSS.ELA.RI.9-10.4; CCSS.ELA.SL.9-10.1;
CCSS.ELA.WHST.9.10.6; CRP.02.; CRP.04; CRP.07

KEY: Test Your Skull Skills

Directions:

Eric's SAE has allowed him to take his passion of hunting and trapping and turn that into his SAE. Through his SAE, he has cleaned numerous skulls for identification and educational purposes in his school.

1. Use the list of wildlife found on the identification list for the National FFA Environmental and Natural Resources CDE to complete the following tasks.
(<https://FFA.app.box.com/file/290508672427?s=q9jsnjqaqpubrwr33wej0wscc5xqggpcu>)
 - a. Choose five wildlife species from this list.
 - b. Find pictures of each species and paste them in the space below. Paste only the top of the picture, so they flip up and you can write on the back of the picture.
 - c. Write the name of each species on the backside of each picture.
 - d. Swap papers with a partner and see how many species you can identify from their skulls.
 - e. Answer the discussion questions.

Answers will vary.

1. Why is identification of wildlife important?

Answers will vary.

2. How many of your partner's species were you able to accurately identify?

Answers will vary.