**Agriculture in Society**

**Unit 2:** Animal and Livestock Production in Agriculture

**Lesson 4:** Animal Products and By-Products

**Lesson 4.2:** Non-Food Animal By-Products

State Orientation to Agriculture in Society Standards:

**OAS 3.10** Explore how animal products and by-products are used in everyday household items

National AFNR Standards:

**AS.06** Classify, evaluate, and select animals based on anatomical and physiological characteristics

Student Learning Objectives:

1. Students will discuss non-food products derived from animals.

Outside Resources

1. CASE
   1. AgX 3.1 Fibers to Fabrics (OAS 3.10)
      1. **Lesson Plan, Lab, Worksheet –** Students will compare and contrast different fiber products based on different qualities like comfort, insulation, and resistance to wear.
   2. AgX 8.1 And Another Thing (OAS 3.10)
      1. **Lesson Plan, Activity-** Students will explore the variety of uses of animal by-products by participating in an activity where students will experiment on different by-products like leather and lanolin.
2. Ag in the Classroom
   1. [Beyond Food](https://faitc.org/lessons/beyond-food/) (OAS 3.10)
      1. **Lesson Plan, Worksheet, and Activity –** Students will explore different animal by-products made from animals. They will participate in activities that will guide them in discussions related to animal by-products.
3. Michigan State University
   1. [Animal By-Products Slideshow](https://docs.google.com/presentation/d/1nDd_AJMviehAwA-qVP8wDv7NMeNpXKYQm4c4XWaSXkg/edit?pli=1#slide=id.p16)
      1. **Slideshow-** This 22-slide slideshow is a good starting point in providing a traditional lecture where students will list major by-products, explain rendering, and compare differences in beliefs between animal rights activities and animal welfarists
4. One Less Thing
   1. [Nonfood and ByProducts from Animals](https://www.onelessthing.net/products/ccans04-4-nonfood-and-byproducts-from-animals-animal-science-complete-curriculum?_pos=1&_sid=ef15a5302&_ss=r)
      1. **Slideshow, Guided Notes, Assessments, Lab/Activities-** This provides a variety of resources to help guide students to better understand the nonfood uses of animals. This resource could be taught as an entire unit. This unit also covers edible animal byproducts as well.
5. University of Idaho
   1. [Animal By-Products](https://www.uidaho.edu/-/media/UIdaho-Responsive/Files/Extension/4-H/Animal-Science-Lesson-Plans/QA-Animal-By-Products-L12-ALL-RRuiz.pdf?la=en&hash=D26574612724064AD4A152B2F49CB74BBD290B07)
      1. **Lesson plan, handouts, Activity, Worksheet-** Students will identify products they use in their daily life that contain animal by-products. Students will work through true or false questions related to byproducts for each major livestock species.
6. Farm Credit of Virginia
   1. [Everything But the.... Animal By-Product Resources](https://www.farmcreditofvirginias.com/knowledge-center/educator-resources/everything-but-the)
      1. **Resource Library-** This provides a wide variety of articles, activities, worksheets, and videos that can help students discover different animal byproducts they use on a daily basis.