

Course: Animal Science II

Unit: Alternative Animals in Agriculture (S4: O1 & O2)

Unit Objectives:

1. Identify specialty agricultural animals.
2. Understand the pros and cons of raising specialty animals in agriculture.
3. Discuss the importance of selection and genetics in alternative animal production.
4. Compare and contrast nutritional needs of alternative animals.
5. Identify specific health and management needs of alternative animals.
6. Identify consumer products derived from specialty animals.
7. Determine consumer demand and marketing opportunities for alternative animal products.

Interest Approach:

Prompt: Identify an unusual animal that you think would be fun to raise. Do you think that you could farm them? Is there a market for them? What would you sell? What challenges might you face when raising this animal?

Please answer these questions on a piece of paper. Prepare to share what you wrote with the class.

Objective 1: Identify specialty agricultural animals.

- Refer back to the interest approach, now is the time for the students to share the animal they chose with the class. List animals as the students share.
 - There is a multitude of alternative animals in agriculture, they may include but are not limited to: rabbit, elk, bison, llama, alpaca, ostrich, emu, honeybee, fish, ducks, etc.
- Discuss what students have shared. Address challenges, marketing, and production of various alternative animals in agriculture.
- Consider showing a video about an alternative animal farm.
 - Consider the American Ostrich Farm (video can be found at: <https://www.youtube.com/watch?v=YSTWYRZaFdw>)
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- Review list of alternative animals in agriculture, see if students can come up with anymore animals to add to the list.

Objective 2: Understand the pros and cons of raising specialty animals in agriculture.

- Allow students to use their original animal from their interest approach or choose a new one. Give them time to complete *Section 1: Pros and Cons of the Alternative Animal Production Worksheet*.
- Discuss the advantages and disadvantages students came up with for raising their specie.

Objective 3: Discuss the importance of selection and genetics in alternative animal production.

- Display “Alternative Animal Genetics” PowerPoint.

- Allow students time to work on *Section 2: Genetics and Selection* of the *Alternative Animal Production Worksheet*

Objective 4: Compare and contrast nutritional needs of alternative animals.

- Alternative animals are going to have different nutritional needs that traditional animals in agriculture.
 - Alternative animals in agriculture include ruminants, poultry, fish, etc.
- Display *Nutrition Overview—Alternative Animals*.
- Give students time to complete *Section 3: Nutrition* on the *Alternative Animal Production Worksheet*.
- The *How It's Made-Dog and Cat Food* video could be used as an interest approach or part of the lesson. It can be accessed at <https://youtu.be/Heid2rsVpE8>

Objective 5: Identify specific health and management needs of alternative animals.

- Have a classroom discussion on overall health and management needs of animals.
- Give students time to complete *Section 4: Health and Management Needs* on the *Alternative Animal Production Worksheet*.
- Discuss the students' findings.

Objective 6: Identify consumer products derived from specialty animals.

- Allow students time to work on *Section 5: Consumer Products* of the *Alternative Animal Production* worksheet.
- (Optional) Have them share with a partner or group what they found out.

Objective 7: Determine consumer demand and marketing opportunities for alternative animal products.

- As an interest approach, consider finding a suitable, school-worthy super bowl commercial for the class to watch.
 - Discuss what the commercial producers did to market the product to potential customers.
- Introduce consumer demand and marketing tactics using the *Alternative Animal Marketing PowerPoint*.
- Allow students time to work on *Section 6: Consumer Demand and Marketing Opportunities* of the *Alternative Animal Production* worksheet.
- Put students in small groups and have them share what consumer products are used from their animal as well as what the consumer demand and marketing opportunities are for their animal.

Unit Review and Assessment

- Direct students to complete *Section 7: Alternative Animal Presentation* of the *Alternative Animal Production Worksheet*.
- Student's presentations should be no more than 10 slides, and 3-5 minutes.
- Student's will share information about their chosen alternative animal in agriculture with the class via PowerPoint, or similar program, presentations.

Possible Alternative Animals in Agriculture SAE's!

- Raise an alternative animal species
- Tour a local alternative animal production facility
- Research what it would take to raise a certain kind of animal
- Get a job at an alternative animal farm
- Work with a local veterinarian to find out what special health considerations are needed for alternative animals.