Animal Systems Interest In A Supervised Agricultural Experience (SAE)

Ideas for developing an animal science-related SAE
Animal System Overview

• According to the National Council for Agricultural Education, Animal Systems (AS) is described as:
  … the application of scientific principles and practices to the production and management of animals.

• Your interest in this area represents a wide range of opportunities related to the production, management and research related to animals.
Areas Of Interest In Animal Systems

- Animal Production…which includes beef cattle, dairy cattle, swine, sheep, goats, poultry, rabbits and other animals used in the food system. Your animal projects include:
  1. Market Animals - potentially used in the food system
  2. Replacement Breeding Animals - young breeding animals to develop
  3. Breeding Animals - used in reproduction
  4. Other animal related projects

- Equine… which could include:
  1. Show Animals/Training Animals - developing equine through training
  2. Replacement Breeding Animals - young breeding animals to develop
  3. Breeding Animals - used in reproduction
Areas Of Interest In Animal Systems (Cont.)

• Small Companion Animals… which could include:
  1. Show Animals/Training Animals - developing through training
  2. Replacement Breeding Animals - young breeding animals to develop
  3. Breeding Animals - used in reproduction

• Aquaculture… which could include:
  1. Market Aquaculture Animals - potentially resold to others
  2. Replacement Breeding Animals - young breeding animals to develop
  3. Breeding Animals - used in reproduction
  4. Other animal-related projects
Areas Of Interest In Animal Systems (Cont.)

- Wildlife Animals… which could include:
  1. Breeding Animals - used in wildlife reproduction
  2. Habitat Development - establishing an environment to raise wildlife
  3. Recreational use of animals - game ranches or other recreational areas

- Animal Health… which could include:
  1. General Animal Care - management of all areas
  2. Nutrition - management of feed stuffs and nutrients related to animal care
  3. Reproduction - management of livestock reproduction
Summary Of Skills Associated With Animal Systems

The ability to:

- Classify, evaluate, select and manage animals based on anatomical and physiological characteristics
- Apply principles of comparative anatomy and physiology to uses within various animal systems and selecting animals for specific purposes
- Prescribe and implement a prevention and treatment program for animal diseases, parasites and other disorders
- Provide for the biosecurity of agricultural animals and production facilities
- Formulate feed rations to provide for the nutritional needs of animals and supplements for optimal growth
Summary Of Skills Associated With Animal Systems

• Evaluate the male and female reproductive systems in selecting animals
• Evaluate animals for breeding readiness and soundness
• Apply scientific principles in the selection and breeding of animals
• Demonstrate safe animal handling and management techniques
• Implement procedures to ensure that animal products are safe
• Design animal housing, equipment and handling facilities for the major systems of animal production
• Evaluate the effects of environmental conditions on animals
## Connect Your Interests To Your Project

<table>
<thead>
<tr>
<th>Entrepreneurship</th>
<th>Placement</th>
<th>Research</th>
<th>Foundational</th>
</tr>
</thead>
<tbody>
<tr>
<td>An animal-related business or for-profit venture</td>
<td>An animal work experience</td>
<td>A research project related to an animal issue</td>
<td>An animal learning experience or career planning</td>
</tr>
<tr>
<td>Time is invested</td>
<td>Time is invested</td>
<td>Time and money (if applicable) are invested</td>
<td>Time is invested</td>
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<tr>
<td>Money is invested &amp; at risk; Provides opportunity to learn and possibly profit in the animal industry</td>
<td>Provides opportunity to learn &amp; possibly earn a paycheck within an animal industry</td>
<td>Provides opportunity to learn about animal research</td>
<td>Provides opportunity to learn through exploring areas of the animal industry</td>
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## Animal Systems - Related Projects Ideas:

<table>
<thead>
<tr>
<th>Entrepreneurship Examples</th>
<th>Placement Examples</th>
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<tbody>
<tr>
<td>Show animal for market</td>
<td>Ranch work in animal care</td>
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<tr>
<td>Breeding animal herd for market animals</td>
<td>Working in a feed testing facility</td>
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<tr>
<td>Replacement female project</td>
<td>Veterinary work in small or large animal</td>
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<td>Animal care consulting (Market or Breeding)</td>
<td>Working at a feed mill operation</td>
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<td></td>
<td>…other ideas where your project is working in an area that is related to the animal industry</td>
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<td>Working at a wildlife management ranch</td>
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Animal Systems - Related Projects Ideas:

<table>
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<th>Research Examples</th>
<th>Foundational Examples</th>
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<tr>
<td>Animal weight gain research</td>
<td>Wildlife nutrition research</td>
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<tr>
<td>Animal health related research</td>
<td>Habitat for wildlife research</td>
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<tr>
<td>Animal reproduction research</td>
<td>Other ideas where your project is related to a research project that is in the animal system</td>
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<tr>
<td>Animal care consulting (Market or Breeding)</td>
<td>Artificial insemination certification</td>
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<td>Animal facility management workshop</td>
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<td>Job shadowing in the animal industry</td>
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<td>Ag issues in the animal industry</td>
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<td></td>
<td>Other ideas where your project is related to learning about the animal system through an educational activity</td>
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Does Animal Systems Align To Your Interest?

• Your project should be:
  1. Based upon your interests
  2. Connected to your agricultural education courses
  3. Aligned to your involvement in FFA activities

If YES, continue to the student examples section. Also, complete the “Explore Your SAE” interactive builder tool and finally, develop an SAE Plan draft based on your results.

If NO, explore another area to determine your interests!