

ANIMAL SCIENCE MERIT BADGE WORKBOOK

This Scoutmaster Bucky Merit Badge Workbook is based off the current *Scouts BSA Requirements*.

Consider also using the Animal Science merit badge class preparation page for clarification and expectations when participating in a Scoutmaster Bucky merit badge opportunity ([online](#) or [in-person](#)).

<https://scoutmasterbucky.com/merit-badges/animal-science/>

Scout's
Name:

Hog Option

This workbook covers only one of the options for this merit badge. Check the Scoutmaster Bucky website for the other possibilities.

REQUIREMENT 1: Name four breeds of livestock in each of the following classifications: horses, dairy cattle, beef cattle, sheep, hogs, poultry, and goats. Tell their principal uses and merits. Tell where the breeds originated.

Four breeds of horses

Four breeds of dairy cattle

Four breeds of beef cattle

Four breeds of sheep

Four breeds of hogs

REQUIREMENT 2: List five diseases that afflict the animals in each of the classifications in requirement 1. Also list five diseases of poultry. Describe the symptoms of each disease and explain how each is contracted and how it could be prevented.

Five diseases afflicting horses, how each are contracted and how each could be prevented

Five diseases afflicting dairy cattle, how each are contracted and how each could be prevented

Five diseases afflicting beef cattle, how each are contracted and how each could be prevented

Five diseases afflicting sheep, how each are contracted and how each could be prevented

Five diseases afflicting hogs, how each are contracted and how each could be prevented

Five diseases afflicting poultry, how each are contracted and how each could be prevented

REQUIREMENT 3: Explain the differences in the digestive systems of ruminants, horses, pigs, and poultry. Explain how the differences in structure and function among these types of digestive tracts affect the nutritional management of these species.

Digestive system of ruminants and how it affects the nutritional management

Digestive system of horses and how it affects the nutritional management

Digestive system of pigs and how it affects the nutritional management

Digestive system of poultry and how it affects the nutritional management

REQUIREMENT 4: Select one type of animal—beef cow, dairy cow, horse, sheep, goat, or hog, or a poultry flock—and tell how you would properly manage it. Include in your discussion nutritional (feeding) concerns, housing, disease prevention, waste control/removal, breeding programs, and biosecurity as appropriate.

Your selected type of animal
How you would properly manage it
Nutritional concerns
Housing
Disease prevention

Waste control/removal

Breeding programs

Biosecurity

REQUIREMENT 5: Explain the importance of setting clear goals for any animal breeding program. Tell how purebred lines of animals are produced. Explain the practice of crossbreeding and the value of this practice.

Importance of setting clear goals

How purebred lines of animals are produced

The practice of crossbreeding

The value of crossbreeding

REQUIREMENT 6: Complete ONE of the following options:

Hog Option

REQUIREMENT A: Make a sketch showing the principal wholesale and retail cuts of pork. Tell about the recommended USDA grades of pork. Tell the basis for each grade.

Recommended USDA grades of pork and basis for each grade

REQUIREMENT B: Outline in writing the proper feeding programs used from the breeding of a gilt or sow through the weaning of the litter. Discuss the feeding programs for the growth and finishing periods.

Proper feeding programs

Feeding programs for the growth and finishing periods

REQUIREMENT C: Do ONE of the following:

REQUIREMENT 1: Raise a feeder pig from weaning to market weight. Keep records of feed intake, weight gains, medication, vaccination, and mortality. Present your records to your counselor for review.

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Completed

REQUIREMENT 2: Visit a farm where hogs are produced, or visit a packing plant handling hogs. Describe what you saw and explain what you learned. If you cannot visit a hog production unit or packing plant, view a video from a packer or processor, or research the internet (with your parent's permission) for information on hogs. Tell about your findings.

REQUIREMENT D: Define the following terms: gilt, sow, barrow, boar.

Gilt

Sow

Barrow

Boar

REQUIREMENT 7: Find out about three career opportunities in animal science. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

Three career opportunities

Education, training, and experience required for one profession