

Mammal Study

Merit Badge Workbook

Merit badges are earned by doing: reading the pamphlet, practicing the skills, and showing your counselor what you have learned.
This workbook gives you a place to organize your notes and track your progress along the way.
Merit badge counselors may not require the use of this or any similar workbook.
You still must satisfy your counselor that you can demonstrate each skill and have learned the information.
Use the space under each requirement to note what you have done and what you want to talk about, not to write out full answers.
When a requirement says discuss, show, tell, explain, or demonstrate, that is what you must do.
No one may add to or subtract from the official requirements found on scouting.org (Guide to Advancement 7.0.4.8).
Scouting America last updated this badge's requirements page on December 31, 2025.
Requirements change from time to time. Double-check scouting.org before you start.

Scout's name: _____ Unit: _____ Date started: _____

Counselor's name: _____ Phone no.: _____ Email: _____

Links marked "Scouting America resources" are the ones Scouting America shares on its official badge page.
Links marked "ScoutSmarts" open the matching part of Cole's guide. This workbook is unofficial and not endorsed by Scouting America.

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1. Explain the following terms: animal, invertebrate, vertebrate, and mammal. Name three characteristics that distinguish mammals from all other animals.

Scouting America resources: Characteristics and Categories of Mammals (video) · 10 Traits of Mammals (video) Mammals—Traits and Groups of Warm-Blooded Animals (video) · Vertebrate Diversity in Mammals (General Characteristics) (video)
ScoutSmarts: Requirement 1 explained

What each term means

Term	What it means
Animal	
Invertebrate	
Vertebrate	
Mammal	

Three characteristics that distinguish mammals from all other animals

#	Characteristic
1	
2	
3	

Requirement 1 completed on _____ counselor initials _____

2. Explain how the animal kingdom is classified. Explain where mammals fit in the classification of animals. Classify three mammals from phylum through species.

Scouting America resources: The 5 Kingdoms in Classification (video) · Animal Classification (video)
The Three Types of Mammals, Differences, and How to Tell (video) · Mammal Species of the World Database (website)
ScoutSmarts: Requirement 2 explained

How the animal kingdom is classified

Where mammals fit in the classification of animals

Three mammals classified from phylum through species

Level	Mammal 1	Mammal 2	Mammal 3
Common name			
Phylum			
Class			
Order			
Family			
Genus			
Species			

Requirement 2 completed on _____ counselor initials _____

3. Do ONE of the following:

☐ **(a)** Spend three hours in two different kinds of natural habitats or at different elevations for a total of six hours. List the different mammal species and how many of each you identified by sight or sign. Tell why all mammals do not live in the same kind of habitat.

Scouting America resources: How to Find Mammal Signs (video)
Animal Tracks Identification Guide | Animal Footprint ID Charts (website)

My two habitats or elevations

Habitat or elevation		Date	Hours spent
Habitat 1			
Habitat 2			

Mammal species I identified by sight or sign

Species	Sight or sign	How many in habitat 1	How many in habitat 2

Why all mammals do not live in the same kind of habitat

☐ **(b)** Spend three hours on five different days in at least a 4-acre area (about the size of 3 football fields) for a total of 15 hours. List the mammal species you identified by sight or sign.

My study area (at least 4 acres)

My five days of observation

Day	Date	Hours spent	What I saw
1			
2			
3			
4			
5			

Mammal species I identified by sight or sign

Species	Sight or sign	Days I found it

Mammal species I identified by sight or sign (continued)

Species	Sight or sign	Days I found it

☐ **(c)** From study and reading, write a simple life history of one nongame mammal that lives in your area. Tell how this mammal lived before its habitat was affected in any way by humans. Tell how it reproduces, what it eats, and its natural habitat. Describe its dependency upon plants and other animals (including humans), and how they depend upon it. Describe how humans have benefited from the mammal you have chosen and whether the mammal has benefited from association with humankind.

Nongame mammal I chose

How it lived before humans affected its habitat

Its life history

Topic	What I learned
How it reproduces	
What it eats	
Its natural habitat	

How it depends on plants and other animals (including humans), and how they depend on it

How humans have benefited from it, and whether it has benefited from humankind

Requirement 3 completed on counselor initials

4. Do ONE of the following:

☐ **(a)** Under the guidance of a nature center or natural history museum, make two study skins of rats or mice. Tell the uses of study skins and mounted specimens respectively.

Scouting America resources: Skinning Your Rat (video) · Preparing Mammal Specimens (video)
Natural History Museums in the US (website)

Nature center or museum Date

☐ Study skin 1 made
☐ Study skin 2 made

Uses of each

	Uses
Study skins	
Mounted specimens	

☐ **(b)** Take good pictures of two kinds of mammals in the wild. Record the date(s), time of day, weather conditions, approximate distance from the animal, habitat conditions, and any other factors you feel may have influenced the animal's activity and behavior.

Scouting America resources: Top 10 Wildlife Photography Shortcuts (video) · The Most Important Wildlife Photography (video) The Ultimate Wildlife Photography Tutorial (website) · Wildlife Photography (website)

My wildlife photo records

What I recorded	Mammal 1	Mammal 2
Kind of mammal		
Date(s)		
Time of day		
Weather conditions		
Approximate distance from the animal		
Habitat conditions		
Other factors that may have influenced its activity and behavior		

☐ **(c)** Write a life history of a native game mammal that lives in your area, covering the points outlined in requirement 3(c). List sources for this information.

Native game mammal I chose

How it lived before humans affected its habitat

Its life history

Topic	What I learned
How it reproduces	
What it eats	
Its natural habitat	

How it depends on plants and other animals (including humans), and how they depend on it

How humans have benefited from it, and whether it has benefited from humankind

My sources

Source (book, website, or person)	Author or publisher

☐ **(d)** Make and bait a tracking pit. Report what mammals and other animals came to the bait.

Scouting America resources: Build Animal Track Station (video)
Creating a Backyard Animal Track Trap With Household Items (video)
Animal Tracking Basics - Track Traps, Measurements, Following Sign (video)

Date I made it _____ Where _____ Bait I used _____

What came to the bait

Date checked	Mammals	Other animals

☐ **(e)** Visit a natural history museum. Report on how specimens are prepared and cataloged. Explain the purposes of museums.

Scouting America resources: Natural History Museums in the US (website)

Natural history museum _____ Date _____

How specimens are prepared and cataloged

The purposes of museums

☐ **(f)** Write a report of 500 words on a book about a mammal species.

Book title _____ Author _____

Mammal species _____ Date I finished my report _____

Outline of my 500-word report (write the full report on separate paper and attach)

☐ **(g)** Trace two possible food chains of carnivorous mammals from the soil through four stages to the mammal.

Scouting America resources: Animal of the Week: Food Chains (video) · Food Chains & Food Webs (video) Tundra Food Chain (website) · **ScoutSmarts:** Requirement 4g explained

Two food chains, from the soil to a carnivorous mammal

	Stage 1	Stage 2	Stage 3	Stage 4	Carnivorous mammal
Chain 1					
Chain 2					

Requirement 4 completed on _____ counselor initials _____

5. Working with your counselor, select and carry out one project that will influence the numbers of one or more mammals.

Scouting America resources: Brushpiles With Game Commission Biologist Dan Mummert (video) Create a Wildlife Habitat Garden (video) · How to Make a WILDLIFE GARDEN! The FOUR Things You MUST INCLUDE! (video)
ScoutSmarts: Requirement 5 explained

My project _____ Mammal(s) it affects _____

Counselor approved on _____ Date finished _____

My plan, and how it will influence the numbers of mammals

What I did

Date	What I did

Requirement 5 completed on _____ counselor initials _____

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6. Discuss the importance of the Leave No Trace Seven Principles and the Outdoor Code as they relate to Mammal Study. Explain how you have followed the Leave No Trace Seven Principles and the Outdoor Code while in natural areas during field observation, specimen collection, and identification.

Scouting America resources: Leave No Trace Basics (video) · Leave No Trace Outdoor Ethics (video)

Why Leave No Trace and the Outdoor Code matter in mammal study

How I have followed them in natural areas

Activity	How I followed the Leave No Trace Seven Principles and the Outdoor Code
Field observation	
Specimen collection	
Identification	

Requirement 6 completed on _____ counselor initials _____

7. Do ONE of the following:

☐ **(a)** Explore careers related to this merit badge. Research one career to learn about the training and education needed, costs, job prospects, salary, job duties, and career advancement. Your research methods may include—with your parent or guardian's permission—an internet or library search, an interview with a professional in the field, or a visit to a location where people in this career work. Discuss with your counselor both your findings and what about this profession might make it an interesting career.

Scouting America resources: 10+ Wildlife Biology Careers You Should Know About (& Salaries) (video)

Careers related to Mammal Study

Career	What interests me about it

The career I researched _____ How I researched it _____

What I learned about it

Topic	My findings
Training and education needed	
Costs	
Job prospects	
Salary	
Job duties	
Career advancement	

What might make it an interesting career

☐ **(b)** Explore how you could use knowledge and skills from this merit badge to pursue a hobby or healthy lifestyle. Research any training needed, expenses, and organizations that promote or support it. Discuss with your counselor what short-term and long-term goals you might have if you pursued this.

Scouting America resources: Top Tips to get into Wildlife Photography (video)
A Look Inside the Life of a Wildlife Rehab Volunteer (video)

My hobby or healthy lifestyle

How I would use Mammal Study knowledge and skills in it

What I found out

Topic	My findings
Training needed	
Expenses	
Organizations that promote or support it	

My goals

	Goals
Short-term	
Long-term	

Requirement 7 completed on counselor initials

Counselor sign-off

Your counselor signs your blue card or approves the badge in Scoutbook, and your unit records it. This line is for your own records.

Counselor's signature Date completed

Official Scouting America resources

Scouting America resources: Mammal Study merit badge page (requirements and resources)
Mammal Study merit badge pamphlet (free PDF) · All merit badges · **ScoutSmarts:** Mammal Study Merit Badge Guide

Made by Cole at ScoutSmarts.com, an Eagle Scout who loves helping Scouts.
Spot an error or a requirement change? Tell me at scoutsmarts.com/contact.
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