



# Mammal Study

## Merit Badge Workbook

This workbook can help you but you still need to read the merit badge pamphlet.

The work space provided for each requirement should be used by the Scout to make notes for discussing the item with his counselor, not for providing the full and complete answers. Each Scout must do each requirement.

No one may add or subtract from the official requirements found in **Boy Scout Requirements** (Pub. 33216 – SKU 34765).

The requirements were last issued or revised in 2004 • This workbook was updated in April 2012.

Scout's Name: \_\_\_\_\_ Unit: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_ Counselor's Phone No.: \_\_\_\_\_

<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about improving this workbook to: [Workbooks@USScouts.org](mailto:Workbooks@USScouts.org)

1. Explain the meaning of "animal," "invertebrate," "vertebrate," and "mammal."

"animal," \_\_\_\_\_  
\_\_\_\_\_

"invertebrate" \_\_\_\_\_  
\_\_\_\_\_

"vertebrate" \_\_\_\_\_  
\_\_\_\_\_

"mammal." \_\_\_\_\_  
\_\_\_\_\_

Name three characteristics that distinguish mammals from all other animals.

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

2. Explain how the animal kingdom is classified. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Explain where mammals fit in the classification of animals. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Classify three mammals from phylum through species.

|         |  |  |  |
|---------|--|--|--|
| Mammal  |  |  |  |
| Phylum: |  |  |  |
| Class:  |  |  |  |
| Order:  |  |  |  |
| Family  |  |  |  |
| Genus   |  |  |  |
| Species |  |  |  |

3. Do ONE of the following:

- a. Spend 3 hours in each of two different kinds of natural habitats or at different elevation. List the different mammal species and individual members that you identified by sight or sign.

| List the different mammal species and individual members that you identified by sight or sign. | Habitat or Elevation 1 | Habitat or Elevation 2 |
|--|------------------------|------------------------|
|  |                        |                        |
|  |                        |                        |
|  |                        |                        |
|  |                        |                        |
|  |                        |                        |
|  |                        |                        |
|  |                        |                        |

Tell why all mammals do not live in the same kind of habitat. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- b. Spend 3 hours on each of 5 days on at least a 25- acre area (about the size of 3 1/2 football fields). List the mammal species you identified by sight or sign..

| List the mammal species you identified by sight or sign | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|-------|-------|-------|-------|-------|
|   |       |       |       |       |       |
|   |       |       |       |       |       |
|   |       |       |       |       |       |
|   |       |       |       |       |       |
|   |       |       |       |       |       |
|   |       |       |       |       |       |
|   |       |       |       |       |       |

- c. From study and reading, write a simple history of one non-game mammal that lives in your area. \_\_\_\_\_

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Tell how this mammal lived before its habitat was affected in any way by humans. \_\_\_\_\_

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Tell how it reproduces, what it eats, and its natural habitat. \_\_\_\_\_

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Describe its dependency upon plants, upon other animals (including humans), and how they depend upon it. \_\_\_\_\_

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Tell how it is helpful or harmful to humankind. \_\_\_\_\_

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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.

Skin 1: \_\_\_\_\_

Skin 2: \_\_\_\_\_

Tell the uses of study skins and mounted specimens respectively. \_\_\_\_\_

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- b. Take good pictures of two kinds of mammals in the wild. Record light conditions, film used, exposure, and other factors, including notes on the activities of the pictured animals.

|                      | Photo 1 | Photo 2 |
|----------------------|---------|---------|
| Mammal:              |         |         |
| Light conditions:    |         |         |
| Film Used:           |         |         |
| Exposure:            |         |         |
| Animal's Activities: |         |         |
|                      |         |         |
| Other factors:       |         |         |
|                      |         |         |

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

Native Game Animal: \_\_\_\_\_

Tell how this mammal lived before its habitat was affected in any way by humans. \_\_\_\_\_

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Tell how it reproduces, what it eats, and its natural habitat. \_\_\_\_\_

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Describe its dependency upon plants, upon other animals (including humans), and how they depend upon it. \_\_\_\_

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Tell how it is helpful or harmful to humankind. \_\_\_\_\_

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- g. Trace two possible food chains of carnivorous mammals from soil through four stages to the mammal.

Possible food chain 1: \_\_\_\_\_

Soil: \_\_\_\_\_

Stage 1: \_\_\_\_\_

Stage 2 \_\_\_\_\_

Stage 3 \_\_\_\_\_

Stage 4 \_\_\_\_\_

Possible food chain 2: \_\_\_\_\_

Soil: \_\_\_\_\_

Stage 1: \_\_\_\_\_

Stage 2 \_\_\_\_\_

Stage 3 \_\_\_\_\_

Stage 4 \_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Requirement resources can be found here:**  
[http://www.meritbadge.org/wiki/index.php/Mammal Study#Requirement resources](http://www.meritbadge.org/wiki/index.php/Mammal%20Study#Requirement%20resources)

## Important excerpts from the [‘Guide To Advancement’](#), No. 33088:

Effective January 1, 2012, the ‘Guide to Advancement’ (which replaced the publication ‘Advancement Committee Policies and Procedures’) is now the *official* Boy Scouts of America source on advancement policies and procedures.

- **[ Inside front cover, and 5.0.1.4 ] — Unauthorized Changes to Advancement Program**  
***No council, committee, district, unit, or individual has the authority to add to, or subtract from, advancement requirements.***  
(There are limited exceptions relating only to youth members with disabilities. For details see section 10, “Advancement for Members With Special Needs”.)
- **[ Inside front cover, and 7.0.1.1 ] — The [‘Guide to Safe Scouting’](#) Applies**  
Policies and procedures outlined in the ‘Guide to Safe Scouting’, No. 34416, apply to all BSA activities, including those related to advancement and Eagle Scout service projects. [Note: Always reference the online version, which is updated quarterly.]
- **[ 7.0.3.1 ] — The Buddy System and Certifying Completion**  
Youth members must not meet one-on-one with adults. Sessions with counselors must take place where others can view the interaction, or the Scout must have a buddy: a friend, parent, guardian, brother, sister, or other relative—or better yet, another Scout working on the same badge— along with him attending the session. When the Scout meets with the counselor, he should bring any required projects. If these cannot be transported, he should present evidence, such as photographs or adult certification. His unit leader, for example, might state that a satisfactory bridge or tower has been built for the Pioneering merit badge, or that meals were prepared for Cooking. If there are questions that requirements were met, a counselor may confirm with adults involved. Once satisfied, the counselor signs the blue card using the date upon which the Scout completed the requirements, or in the case of partials, initials the individual requirements passed.
- **[ 7.0.3.2 ] — Group Instruction**  
It is acceptable—and sometimes desirable—for merit badges to be taught in group settings. This often occurs at camp and merit badge midways or similar events. Interactive group discussions can support learning. The method can also be attractive to “guest experts” assisting registered and approved counselors. Slide shows, skits, demonstrations, panels, and various other techniques can also be employed, but as any teacher can attest, not everyone will learn all the material.

There must be attention to each individual’s projects and his fulfillment of *all* requirements. We must know that every Scout— actually and *personally*— completed them. If, for example, a requirement uses words like “show,” “demonstrate,” or “discuss,” then every Scout must do that. It is unacceptable to award badges on the basis of sitting in classrooms *watching* demonstrations, or remaining silent during discussions. Because of the importance of individual attention in the merit badge plan, group instruction should be limited to those scenarios where the benefits are compelling.

- **[ 7.0.3.3 ] — Partial Completions**  
Scouts need not pass all requirements with one counselor. The Application for Merit Badge has a place to record what has been finished — a “partial.” In the center section on the reverse of the blue card, the counselor initials for each requirement passed. In the case of a partial completion, he or she does not retain the counselor’s portion of the card. A subsequent counselor may choose not to accept partial work, but this should be rare. A Scout, if he believes he is being treated unfairly, may work with his Scoutmaster to find another counselor. An example for the use of a signed partial would be to take it to camp as proof of prerequisites. Partials have no expiration except the 18th birthday.