

MERIT BADGE SERIES



MAMMAL STUDY



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Requirements

1. Explain the meaning of “animal,” “invertebrate,” “vertebrate,” and “mammal.” Name three characteristics that distinguish mammals from all other animals.
2. Explain how the animal kingdom is classified. Explain where mammals fit in the classification of animals. Classify three mammals from phylum through species.
3. Do ONE of the following:
 - a. Spend three hours in each of two different kinds of natural habitats or at different elevations. List the different mammal species and individual members that you identified by sight or sign. Tell why all mammals do not live in the same kind of habitat.
 - b. Spend three hours on each of five days on at least a 25-acre area (about the size of 3¹/₂ football fields). List the mammal species you identified by sight or sign.
 - 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. Tell how it is helpful or harmful to humankind.

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.
 - 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.
 - 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.
 - d. Make and bait a tracking pit. Report what mammals and other animals came to the bait.
 - e. Visit a natural history museum. Report on how specimens are prepared and cataloged. Explain the purposes of museums.
 - f. Write a report of 500 words on a book about a mammal species.
 - g. Trace two possible food chains of carnivorous mammals from soil through four stages to the mammal.
5. Working with your counselor, select and carry out one project that will influence the numbers of one or more mammals.



Resources for Mammal Study

Scouting Literature

Pocket Guide to Mammals; Animal Science, Dog Care, Environmental Science, Fish and Wildlife Management, Nature, Pets, and Veterinary Medicine merit badge pamphlets

Visit the Boy Scouts of America's official retail website at <http://www.scoutstuff.org> for a complete listing of all merit badge pamphlets and other helpful Scouting materials and supplies.

Books

- Alderton, David. *Foxes, Wolves, and Wild Dogs of the World*. Sterling, 1998.
- Barkhausen, Annette, and Franz Geiser. *Rabbits and Hares*. Gareth Stevens, 1994.
- Bowen, Betsy. *Tracks in the Wild*. Little, Brown, 1993.
- Bowers, Nora, Rick Bowers, and Kenn Kaufman. *Mammals of North America*. Houghton Mifflin Harcourt, 2004.
- Carwardine, Mark, et al. *Whales, Dolphins, and Porpoises*. Nature Company: Time-Life Books, 1998.
- Chinery, Michael, ed. *The Kingfisher Illustrated Encyclopedia of Animals: From Aardvark to Zorille—and 2,000 Other Animals*. Kingfisher Books, 1992.
- Elbroch, Mark. *Animal Skulls: A Guide to North American Species*. Stackpole Books, 2006.
- . *Mammal Tracks and Sign: A Guide to North American Species*. Stackpole Books, 2003.
- Graham, Gary L. *Bats of the World*. St. Martin's Press, 2001.
- Halfpenny, James. *A Field Guide to Mammal Tracking*. Johnson Books, 1988.
- Hare, Tony. *Animal Fact File: Head-to-Tail Profiles of More Than 100 Animals*. Facts On File, 1999.
- Hodge, Deborah. *Deer, Moose, Elk, and Caribou*. Kids Can Press, 1999.
- Lumpkin, Susan. *Small Cats*. Facts On File, 1993.
- Miller, Sara Swan. *Rodents: From Mice to Muskrats*. Franklin Watts, 1998.
- Stewart, Brent S., Phillip J. Clapham, and James A. Powell. *Audubon Society Guide to Marine Mammals of the World*. Knopf, 2002.
- Vaughan, Terry A., James M. Ryan, and Nicholas J. Czaplewski. *Mammalogy*, 5th ed. Jones and Bartlett Learning, 2010.

Whitaker, John O. *National Audubon Society Field Guide to North American Mammals*. Alfred A. Knopf, 1996.

Wilson, Don E., and Sue Ruff. *Smithsonian Book of North American Mammals*. Smithsonian Books, 1999.

Zim, Herbert Spencer, and Donald F. Hoffmeister. *Mammals: A Guide to Familiar American Species*. Golden Press, 1987.

National Audubon Society

700 Broadway
New York, NY 10003
Telephone: 212-979-3000
Website: <http://www.audubon.org>

National Wildlife Federation

11100 Wildlife Center Drive
Reston, VA 20190
Toll-free telephone: 800-822-9919
Website: <http://www.nwf.org>

Other Resources

Mammals of the Great Smoky Mountains and Southern Appalachians
App by BDY Environmental LLC

Organizations and Websites

American Society of Mammalogists

P.O. Box 7060
Lawrence, KS 66044
Telephone: 785-843-1234
Website: <http://mammalsociety.org>

Association of American Zoos and Aquariums

8403 Colesville Road, Suite 710
Silver Spring, MD 20910-3314
Telephone: 301-562-0777
Website: <http://www.aza.org>

Bat Conservation International

P.O. Box 162603
Austin, TX 78716
Telephone: 512-327-9721
Website: <http://www.batcon.org>

Conservation and Research Center

National Zoo Information
Washington, DC 20013-7012
Telephone: 202-633-4800
Website: <http://www.si.edu/crc>

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