

MERIT BADGE SERIES



GARDENING



BOY SCOUTS OF AMERICA®



STEM-Based

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GARDENING



"Enhancing our youths' competitive edge through merit badges"



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Requirements

1. Do the following:
 - a. Explain to your counselor the most likely hazards associated with gardening and what you should do to anticipate, help prevent, mitigate, and respond to these hazards.
 - b. Discuss the prevention of, and treatment for, health concerns that could occur while gardening, including cuts, scratches, puncture wounds, insect bites, anaphylactic shock, heat reactions, and reactions from exposure to pesticides and fertilizers.
2. Do the following:
 - a. Grow six vegetables, three from seeds and three from seedlings, through harvest.
 - b. Grow six flowers, three from seeds and three from seedlings, through flowering.
3. Give the nutritional value of the following:
 - a. Three root or tuber crops
 - b. Three vegetables that bear above ground
 - c. Three fruits
4. Test 100 seeds for germination. Determine the percentage of seeds that germinate. Explain why you think some did not germinate.
5. Visit your county extension agent's office, local university agricultural college, nursery, or a botanical garden or arboretum. Report on what you learned.
6. Explain to your counselor how and why honey bees are used in pollinating food crops. Discuss the problems facing the bee population today, and tell what you think would be the impact to humanity if there were no pollinators.

7. Identify five garden pests (insects, diseased plants). Recommend two solutions for each pest. At least one of the two solutions must be an organic method.
8. Do ONE of the following:
 - a. Build a compost bin and maintain it for 90 days.
 - b. Build a vermipost bin (worm compost bin) and maintain it for 90 days.
 - c. Build a hydroponic garden containing three vegetables or herbs, or three ornamental plants. Maintain this garden through harvest or flowering, or for 90 days.
 - d. Build one water garden, either in a container (at least 12 by 6 inches and 6 inches deep), or in the ground as a small, decorative pond no larger than 6 by 3 feet and 24 inches deep. Maintain the water garden for 90 days.
 - e. Prepare a honey super for use on a hive or colony. Remove a filled honey super from the hive or colony and prepare the honey for sale.



Gardening Resources

Scouting Literature

Architecture and Landscape Architecture, Bird Study, Insect Study, Nature, Plant Science, and Soil and Water Conservation 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

Bartholomew, Mel. *All New Square Foot Gardening*. Cool Springs Press, 2006.

Bradley, Fern Marshall, and Barbara W. Ellis, eds. *Rodale's All-New Encyclopedia of Organic Gardening*. Rodale Press, 1998.

Bush, Michael. *The Practical Beekeeper: Beekeeping Naturally*, volumes I, II, and III. X-Star Publishing Company, 2011.

Cranshaw, Whitney. *Garden Insects of North America: The Ultimate Guide to Backyard Bugs*. Princeton University Press, 2004.

Elzer-Peters, Katie. *Beginner's Illustrated Guide to Gardening: Techniques to Help You Get Started*. Cool Springs Press, 2012.

Flottum, Kim. *The Backyard Beekeeper: An Absolute Beginner's Guide to Keeping Bees in Your Yard and Garden*. Quarry Books, 2010.

Gillman, Jeff. *The Truth About Garden Remedies: What Works, What Doesn't, and Why*. Timber Press, 2008.

McGee, Rose Marie Nichols, and Maggie Stuckey. *Bountiful Container*. Workman Publishing Company, 2002.

Phillips, Ellen, and C. Colston Burrell. *Rodale's Illustrated Encyclopedia of Perennials*. Rodale Press, 2004.

Pleasant, Barbara. *The Complete Compost Gardening Guide*. Storey Publishing, 2008.

———. *Starter Vegetable Gardens: 24 No-Fail Plans for Small Organic Gardens*. Storey Publishing, 2010.

Richardson, Fern. *Small-Space Container Gardens: Transform Your Balcony, Porch, or Patio With Fruits, Flowers, Foliage, and Herbs*. Princeton University Press, 2004.

Sanchez, Janet, and the editors of Sunset Books. *Perennials*, second edition. Sunset Books, 2000.

Periodicals

Bee Culture

Toll-free telephone: 800-289-7668
Website: <http://www.beeculture.com>

Garden Gate

Toll-free telephone: 800-341-4769
Website:
<http://www.gardengatemagazine.com>

Mother Earth News

Toll-free telephone: 800-234-3368
 Website:
<http://www.motherearthnews.com>

Organic Gardening

Toll-free telephone: 800-666-2206
 Website:
<http://www.organicgardening.com>

Organizations and Websites**American Horticultural Society**

Website: <http://www.ahs.org>

Back Yard Beekeepers Association

Website:
<http://www.backyardbeekeepers.com>

Bee Research Laboratory

USDA Agricultural Research Service
 Telephone: 301-504-7299
 Website:
http://www.ars.usda.gov/Main/site_main.htm?modecode=12-45-33-00

Home and Garden Television

Website: <http://www.hgtvgardens.com>

National Gardening Association

Telephone: 802-863-5251
 Website: <http://www.garden.org>

National Wildlife Federation

Toll-free telephone: 800-822-9919
 Website: <http://www.nwf.org>

Old Farmer's Almanac

Telephone: 603-563-8111
 Website: <http://www.almanac.com>

Trust for Public Land

Toll-free telephone: 800-714-5263
 Website: <http://www.tpl.org>

U.S. Department of Agriculture

1400 Independence Ave. SW
 Washington, DC 20250
 Telephone: 202-720-2791
 Website: <http://www.usda.gov>

U.S. National Arboretum

3501 New York Avenue NE
 Washington, DC 20002-1958
 Telephone: 202-245-2726
 Website: <http://www.usna.usda.gov>

World Aquaculture Society

Telephone: 225-578-3137
 Website: <http://www.was.org>

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