BOY SCOUTS OF AMERICA
MERIT BADGE SERIES

WHITEWATER

"Enhancing our youths’ competitive edge through merit badges"
Requirements

1. Do the following:
   a. Review with your counselor the first aid for injuries or illnesses that could occur while working on the Whitewater merit badge, including hypothermia, heat reactions, dehydration, insect stings, blisters, bruises, cuts, and shoulder dislocation.
   b. Identify the conditions that must exist before performing cardiopulmonary resuscitation (CPR) on a person. Explain how such conditions are recognized.
   c. Demonstrate proper technique for performing CPR using a training device approved by your counselor.

2. Do the following:
   a. Review and compare BSA Safety Afloat and the American Whitewater safety guidelines and demonstrate your understanding of these principles by answering questions from your counselor.
   b. Identify and explain the use and importance of safety equipment on moving water. Include in your explanation a discussion about throw ropes, whistles, and how to choose and properly fit PFDs (personal flotation devices) and helmets.

3. Before doing requirements 4 through 13, earn the Canoeing merit badge if you will be using a canoe to earn this merit badge. If you will be using a kayak, earn the Kayaking BSA Award.
4. Do ONE of the following:
   a. If you are completing these requirements as a tandem canoeist, demonstrate basic canoe-handling skills by completing the Scout gate test within 160 seconds while paddling tandem with a buddy. Then demonstrate the following strokes: cross forward, cross draw, bow pry, Duffek, high brace, and low brace.
   b. If you are completing these requirements as a solo canoeist, demonstrate basic solo canoe-handling skills by completing the Scout gate test within 160 seconds. Then demonstrate the following strokes: cross forward, cross draw, stern pry, Duffek, high brace, and low brace.
   c. If you are using a kayak to complete these requirements, demonstrate basic kayak-handling skills by completing the Scout gate test within 160 seconds. Demonstrate the following strokes: Duffek, high brace, low brace, and sculling draw. Then do the following:
      (1) Move the kayak forward in a reasonably straight line for 10 yards.
      (2) Move the kayak sideways to the right and to the left.
      (3) Pivot 360 degrees to the right and left.
      (4) Stop the kayak.

5. Do the following:
   a. Explain the importance of scouting before committing to running a rapid, and discuss good judgment when evaluating a stretch of river or a particular rapid.
   b. Explain the terms downstream V, riffle, strainer, eddy, eddy line, pillow, ledge, bend, shallows, falls, low-head dam, current, rock, drop, horizon line, wave, standing wave, hydraulic, and sleeper.
   c. Explain how to scout and read a river while ashore and while afloat, and discuss the importance of hazard recognition.
   d. Demonstrate your ability to read the river where you are practicing and demonstrating your whitewater skills.
6. Explain the International Scale of River Difficulty and apply the scale to the stretch of river where you are practicing and demonstrating your whitewater skills. Identify the specific characteristics of the river that are factors in your classification according to the International Scale.

7. Explain the importance of communication during every whitewater outing. Explain and then demonstrate using the following river signals: “Run right,” “Run left,” “Run down the center,” “Stop,” “Are you OK?” and “Help!”

8. Do the following:
   a. Explain the differences between flatwater and whitewater canoes. Identify the different materials used in modern whitewater canoe construction and the advantages and disadvantages of each.
   b. Describe the various types of kayaks and how they differ in design, materials, and purpose.
   c. Identify the advantages and special uses for kayaks and decked canoes in moving water.
   d. Discuss the construction, safety, and functional features of paddles used in whitewater activities.

9. Discuss the personal and group equipment necessary for a safe whitewater outing and how and why it is used. Explain how to pack and protect these items.

10. Wearing the proper personal flotation device (PFD) and being appropriately dressed for the weather and water conditions, perform the following skills in moving water in a properly equipped whitewater craft of your choice (tandem canoe, solo canoe, or solo kayak). If a tandem canoe is used, the skills must be demonstrated from both the bow and stern positions.
    a. Launch and land.
    b. Paddle forward in a straight line.
    c. Backpaddle.
    d. Sideslip, both sides.
    e. Ferry upstream and downstream.
    f. Eddy turn.
    g. Peel out.
11. Explain and demonstrate:
   a. Self-rescue and procedures when capsized in moving water, including a wet exit if necessary
   b. Safe rescue of others in various whitewater situations using a throw rope
   c. Portaging—when and how to do it
   d. The whitewater buddy system using at least three persons and three craft

12. Discuss the use of inflatable rafts on moving water. In your discussion, explain the special safety precautions that should be taken when using an inflatable raft and the risks of “tubing” on moving water.

13. Participate in a whitewater trip using either a canoe or kayak on a Class I or Class II river. Help to prepare a written plan, specifying the route, schedule, equipment, safety precautions, and emergency procedures. Determine local rules and obtain permission from landowners and land managers in advance. Explain what steps you have taken to comply with BSA Safety Afloat and the American Whitewater safety guidelines. Execute the plan with others.
Whitewater Resources

Scouting Literature
Boy Scout Handbook; Fieldbook; Deck of First Aid; Emergency First Aid pocket guide; Be Prepared First Aid Book; Kayaking BSA Award application; Canoeing, Rowing, and Small-Boat Sailing merit badge pamphlets

Visit the Boy Scouts of America’s official retail Web site (with your parent’s permission) at http://www.scoutstuff.org for a complete listing of all merit badge pamphlets and other helpful Scouting materials and supplies.

Books


Magazines

Canoe & Kayak
10526 NE 68th St., Suite 3
Kirkland, WA 98033
Telephone: 425-827-6363
Web site: http://www.canoekayak.com

Paddler
12040 98th Ave. NE, Suite 205
Kirkland, WA 98034
Toll-free telephone: 425-814-4140
Web site: http://www.paddlermagazine.com

Organizations and Web Sites

American Canoe Association
7432 Alban Station Blvd., Suite B-232
Springfield, VA 22150
Telephone: 703-451-0141
Web site: http://www.acanet.org

American Whitewater
P.O. Box 1540
Cullowhee, NC 28723
Toll-free telephone: 866-262-8429
Web site: http://www.americanwhitewater.org

USA Canoe/Kayak
301 S. Tryon St., Suite 1750
Charlotte, NC 28282
Telephone: 704-348-4330
Web site: http://www.usack.org

United States Canoe Association
53 Ross Road
Preston, CT 06365
Web site: http://www.uscanoe.com

Acknowledgments

The Boy Scouts of America thanks writer and whitewater enthusiast Bruce Newell for his assistance with revising the Whitewater merit badge requirements and for writing the manuscript for this new edition of the pamphlet.

We are grateful for the input of Dr. Richard Thomas, Scottsdale, Arizona, for his assistance with revising the requirements and for reviewing the manuscript, photos, and illustrations. Dr. Thomas, who is a BSA Aquatics Instructor and an American Canoe Association Canoeing Instructor Trainer, is an avid Scouter who serves as a Western Region National Camping School Aquatics section director and Grand Canyon Council Aquatics Committee chair.

Thanks also to Gordon Black, national director, American Canoe Association Safety Education and Instruction, for his input on revising the requirements and for his review of the manuscript, photos, and illustrations.

The BSA appreciates Scouters David Bell, Ph.D. (BSA Health and Safety Committee member), Chris Stec (ACA Canoeing Instructor Trainer), and Sam Fowlkes (ACA Chairman of Safety, Education, and Instruction, and ACA Canoeing Instructor Trainer) for their assistance with this new edition of the Whitewater merit badge pamphlet.

Thanks also to Lynn Brennard and John Brennard for their input.

Thanks to American Whitewater, in particular Jason Robertson, for allowing the BSA to adapt its American Whitewater Safety Code for the safety section of this pamphlet.