

MERIT BADGE SERIES



WHITEWATER



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"Enhancing our youths' competitive edge through merit badges"



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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

- Bennett, Jeff. *The Complete Whitewater Rafter*. International Marine/Ragged Mountain Press, 1996.
- . *The Essential Whitewater Kayaker*. International Marine/Ragged Mountain Press, 1999.
- Blaine, Mark. *Whitewater: The Thrill and Skill of Running the World's Great Rivers*. Black Dog and Leventhal Publishers, 2001.
- Bechdel, Les. *River Rescue: A Manual for Whitewater Safety*. Appalachian Mountain Club Books, 1997.
- Grant, Gordon. *Trailside Guide: Canoeing*. W. W. Norton & Company, 2003.
- Harrison, Dave. *Canoeing: The Complete Guide to Equipment and Technique*. Stackpole Books, 1996.
- Jackson, Eric. *Whitewater Paddling: Strokes & Concepts*. Stackpole Books, 1999.
- Krauzer, Steven M. *Trailside Guide: Kayaking*. W. W. Norton & Company, 2003.
- Mason, Bill. *Path of the Paddle: An Illustrated Guide to the Art of Canoeing* (revised and updated by Paul Mason). Firefly Books, 1999.
- Mason, Paul. *Thrill of the Paddle: The Art of Whitewater Canoeing*. Firefly Books, 1999.
- Nealy, William. *Kayak: A Manual of Technique*. Menasha Ridge Press, 1986.
- Ray, Slim. *The Canoe Handbook: Techniques for Mastering the Sport of Canoeing*. Stackpole Books, 1992.

Magazines

Canoe & Kayak

10526 NE 68th St., Suite 3
 Kirkland, WA 98033
 Telephone: 425-827-6363
 Web site: <http://www.canoeandkayak.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>

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