

CLIMBING AND RAPPELLING

Go Vertical!

Your heart fluttering madly, you step gingerly toward the edge of the cliff, sit down on an invisible chair, and then take a single step into thin air. At first, you can hardly let the rope slide through your hands, but then you start taking baby steps down the face of the cliff: one step, then another, then another. Halfway down, you bounce out just a little, beginning to feel the first surge of confidence. When you touch the ground, you're glad to be safe. But you're also ready to conquer the cliff again!

Climbing and rappelling are among the most exciting activities you can do in Scouting. Whether you visit a climbing gym, a tower at Scout camp, or a wilderness site with cliffs and boulders, you will enjoy the physical rush of descending on a rope and the mental challenge of finding a path back to the top.

Objectives

This month's activities should:

- Teach Scouts the principles of Climb On Safely.
- Show them how to identify climbing safety hazards and how to avoid them.
- Help them become familiar with climbing equipment.
- Teach the knots used in climbing.
- Demonstrate the difference between climbing and rappelling.
- Let Scouts learn and demonstrate climbing and rappelling skills.

RELATED ADVANCEMENT AND AWARDS

- Tenderfoot requirement 2
- Second class requirement 3a
- First Class requirement 3
- Camping merit badge requirement 9b6
- Climbing merit badge
- Rock Climbing and Rappelling Varsity Scout activity pin
- Ranger: Mountaineering elective



Leadership Planning

As a leadership team, you may want to discuss the following items when choosing climbing and rappelling as your program feature during your planning meetings.

1. Where can we find a BSA-certified climbing instructor to help us learn about climbing and rappelling?
2. Where do we want to climb, and what climbing routes are available at the site we want to visit?
3. What is our unit's current skill level? Do our climbers have the skills required for the site we want to visit?
4. What crew equipment do we need?
5. How much will the outing cost?
6. Do we have the correct number of qualified and certified adults for the meetings and main event?
7. How might the weather affect our plans?
8. How can we involve parents?
9. How can we incorporate Scout skills and advancement into the main event?
10. To meet our needs, what should we change in the sample meeting plans?

PARENTS CAN HELP WITH THE CLIMBING AND RAPPELLING PROGRAM BY:

1. Providing the necessary qualified leadership for the activity (either getting trained or finding someone who is)
2. Providing transportation for the main event
3. Helping rent or purchase gear
4. Researching places in the area to climb or rappel
5. Helping ensure that the main event is conducted in a safe manner

CLIMBING AND RAPPELLING INFORMATION

Climbing and rappelling activities carry more risk than less adrenaline-fueled activities like nature study and pioneering. With proper management, that risk can be minimized. The Scout motto, "Be Prepared," can help you ensure that your climbing and rappelling activities are fun and safe.

Climb On Safely

Climb On Safely is the Boy Scouts of America's procedure for organizing BSA climbing and rappelling activities at a natural site or a specially designed facility such as a climbing wall or tower.

Climb On Safely includes eight core points. These guidelines are summarized below; for more details, see *Climb On Safely*, No. 430-099, or complete Climb On Safely training.

1. **Qualified Supervision**—All climbing and rappelling must be supervised by a mature, conscientious adult at least 21 years of age who understand the risks inherent in these activities. This adult supervisor is trained in and committed to compliance with the eight points of Climb On Safely and is responsible for recruiting trained instructors and verifying their qualifications. One adult supervisor is required for every 10 participants with a minimum of two adults for any one group.





2. **Qualified Instructors**—A qualified climbing and rappelling instructor who is at least 21 years of age and trained in the specific type of climbing must supervise all BSA climbing and rappelling activities. There must be a minimum of two instructors for all climbing and rappelling activities (up to 12 participants) and one additional instructor (at least 18 years of age) for up to each additional six participants, maintaining a 6:1 ratio.

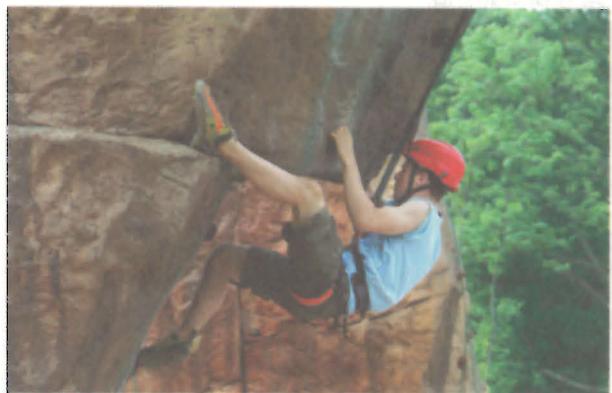


3. **Physical Fitness**—Evidence of fitness for the climbing and rappelling activity and a current BSA Annual Health and Medical Record are required. The adult supervisor should adapt all supervision, discipline, and precautions to anticipate any potential risks associated with individual health conditions.

4. **Safe Area**—All BSA climbing and rappelling activities must be conducted using an established climbing and rappelling site or facility. A qualified climbing instructor should survey the site in advance of the activity to identify and evaluate possible hazards and to determine whether the site is suitable for the age, maturity, and skill level of the participants.

Each participant and staff member in the fall zone of a climbing and rappelling site must wear a UIAA- or CE-approved rock-climbing helmet. Everyone must be anchored or tethered when within eight feet of a falling hazard.

5. **Equipment**—The climbing instructor should verify that the proper equipment is available for the size and ability level of the participants. Helmets, harnesses, rope, and climbing hardware must meet appropriate requirements.



6. **Planning**—Proper planning includes submitting a tour and activity plan, sharing the climbing and rappelling plan and an alternate plan with parents and the unit committee, securing necessary permits or written permission for using private or public lands, enlisting the help of a qualified climbing instructor, and obtaining a current weather report for the area before the group's departure.

7. **Environmental Conditions**—The instructor, each adult leader, and each participant assume responsibility for monitoring potentially dangerous environmental conditions that may include loose, crumbly rock; poisonous plants; wildlife; and inclement weather.

8. **Discipline**—Each participant knows, understands, and respects the rules and procedures for safely climbing and rappelling and follows Climb On Safely and Leave No Trace. All participants should respect and follow all instructions and rules of the climbing instructor.



Climb On Safely Training

Climb On Safely training is available in a classroom setting and at www.myscouting.scouting.org. Participants are issued a Climb On Safely card, No. 33774, that is current for two years from the date of training.

Climbing and Rappelling Activity Limitations

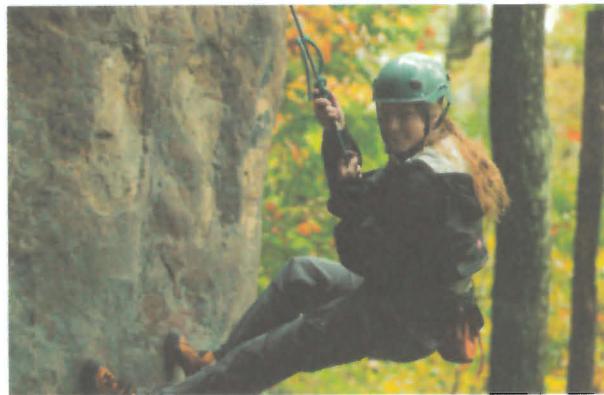
Climb On Safely includes the following limits on activities.

Boy Scouts

- Bouldering no higher than the climber's shoulder height, with trained spotters
- Top-rope climbing with trained belayers
- Rappelling with trained belayers
- Belaying with supervision and a backup



- Practicing lead climbing with a top-rope belay.
- Units with youth who are at least 13 years of age may elect to participate in lead climbing and/or snow and ice climbing only with training from a nationally recognized organization that trains climbing instructors. BSA climbing directors and instructors are not trained in lead climbing or snow and ice climbing.
- Climbing and rappelling facilities may set more restrictive standards than at the local council and district level.



The Week of the Outing

Within the week prior to your main event, it is important to consider these issues.

- Check to be sure that the weather predicted for the place you intend to go is right for what you intend to do; many climbing and rappelling sites do not allow climbing for a certain number of days after it has rained or snowed.
- Check to see that the participants have the necessary equipment and gear for the outing.

Older Boy Scouts, Varsity Scouts, and Venturers

- Bouldering no higher than the climber's shoulder height, with trained spotters.
- Top-rope climbing with trained belayers.
- Belaying with supervision.
- Rappelling with trained belayers.
- Only top-rope climbing only at the council and district levels.



CLIMBING AND RAPPELLING GAMES

Shape Shifters

Equipment: A long piece of webbing tied in a loop with a water knot

How to play: This game is meant to foster communication and trust. Have everyone grab on to the piece of webbing with both hands. The leader of the game tells everyone to close his or her eyes and to not speak during the exercise. The leader then asks everyone to get into a circle without talking. Repeat this exercise with different shapes (triangles, squares, etc.). Give each player a chance to lead.

Notes: If you have a large group, divide in two teams and use two pieces of webbing. The teams could compete to see which forms a shape faster.

Knot Relay

Equipment: 1- to 3-foot piece of rope per team of three to five players. (Aim for two to four teams.)

How to play: Designate starting and ending locations and a stump or surface—the ground is OK—where knots will be tied. When the game leader says “Go!” and names a knot, the first person on each team runs to the stump/surface and ties that knot. A judge at the location checks it. If it is correct, the player unties the knot and runs back to tag the next player. If it is incorrect, the judge teaches the knot and lets the player try again. The leader can add as many knots as desired, but each player must tie each knot.

Notes: Knots could include figure eight follow-through, figure eight on a bight, double fisherman’s, bowline, butterfly knot, Prusik knot, and double overhand knot

Ground Belay Relay

Equipment: Two or more ropes (60 to 180 feet long), at least two harnesses for each rope, a rudimentary anchor (webbing and carabiners), and a belay device for each rope

How to play: Along a flat surface, set up two or more simulated top-rope belays. Divide into teams that will relay a belayed “climber” along the floor. Be sure proper commands are used. Team members can exchange harnesses as needed.

Scoring: This is a timed race. A penalty of 5 seconds is assessed for each mistake, such as wrong knots, improper harness wear, or missing commands.

Notes: Use variations as needed, but keep the focus on safety.

What Am I?

Equipment: An assortment of gear and knots, such as harness, ATC, Grigri, rappelling eight, rope, cord, webbing, figure eight follow-through, figure eight on a bight, double fisherman’s, bowline, butterfly knot, Prusik, and double overhand; sticky notes that are sequentially numbered; a piece of paper and pencil for every player

How to play: Lay out all the gear, putting a numbered sticky note on each piece. Each player then identifies each piece and writes it down on paper.

Scoring: Teams check their responses and earn a point for each correct answer. The team with the most points wins.





E.D.G.E. Ideas

Explain how it is done—Tell them.

Demonstrate the steps—Show them.

Guide learners as they practice—Watch them do it.

Enable them to succeed on their own—Have them practice/teach it.

EXPLAIN

- Talk about the several knots needed during climbing and rappelling.
- Explain the types of anchors needed in an outdoor area vs. an indoor area.
- Describe the types of gear needed for climbing, rappelling, and belaying.
- Discuss techniques for climbing.
- Discuss how to deal with environmental issues.
- Explain how to find and access safe climbing areas that meet the needs of the group.
- Explain how to care for gear.

DEMONSTRATE

- Demonstrate how to tie the knots needed for both climbing and rappelling.
- Demonstrate how to tie several types of anchors.
- Demonstrate how to put on or use the gear for climbing and rappelling.
- Demonstrate several climbing techniques.
- Show what clothing and personal equipment are best for climbing.
- Show what types of routes and climbing areas are best for the group.
- Show climbing training videos.

GUIDE

- Have Scouts practice belaying techniques while others “climb” a floor.
- Ask the Scouts to tie climbing and rappelling knots while the leader demonstrates.
- Divide Scouts into groups. Teach them how to tie anchors while following the leader.
- Help the Scouts put on harnesses and use the belay and rappelling equipment.
- Talk Scouts through climbing techniques while they are doing it.
- Remind Scouts to use the proper clothing and sun protection during the activity.
- Show Scouts how to inspect equipment before any climbing and rappelling activity.

ENABLE

- Have Scouts inspect equipment before every climbing and rappelling activity.
- Let the Scouts tie the knots for the activity while having the adults double-check them.
- Let Scouts help tie anchors for the activity.
- Have Scouts put their gear on and have someone double-check it.
- Let Scouts try to belay other Scouts.
- Let the Scouts try climbing techniques on their own.

MAIN EVENT SUMMARIES

● ESSENTIAL	■ CHALLENGING	◆ ADVANCED
Day Activity	Day Activity	Overnight Activity
A trip to an indoor climbing gym—Get beginning climbers started by visiting a local climbing gym, rock wall at a camp, or a similar outdoor site. Spend several hours practicing basic skills and developing confidence.	Outdoor climbing—Go to a pre-selected natural climbing and rappelling area; camp overnight as appropriate. Choose a safe place for trained consultants to assist with different aspects of the activity such as setup, instruction, group management, and the main activity. Have easy to challenging routes to meet the varying skill levels.	Climbing competition—Compete in an organized climbing event. Most often held at indoor climbing facilities, these competitions usually include lead, speed, and bouldering. Choose an event appropriate for the group's skill level. This is a great activity for competing as a team. Skilled units could sponsor their own event with appropriate supervision and support.



CLIMBING AND RAPPELLING

Meeting Plan: Hazards and Equipment



Week 1 Date _____

ACTIVITY	DESCRIPTION	RUN BY	TIME*
Preopening 15 minutes before meeting	Show selected climbing and rappelling videos from the Internet.		6:45 p.m.
Opening Ceremony 10 minutes	Flag presentation Oath and Law Uniform inspection		7 p.m.
Group Instruction 15 minutes	<ul style="list-style-type: none">• Lead a discussion on the most likely hazards that may be encountered while climbing. Include information on risks, weather, nature, injuries, equipment, etc.• Introduce basic climbing gear. Display the gear with the option for Scouts to handle it and ask questions.		7:10 p.m.
Skills Instruction 35 minutes	<ul style="list-style-type: none">• Discuss proper attire and need for helmet, closed-toe shoes, and harness.• Learn how to put on and adjust harness and helmet properly.• Learn how to inspect and care for a rope.• Review the above equipment and skills.• Learn the use of the equipment for anchors.• Compare different carabiners and discuss how to use them properly.• Learn the proper care and placement of edge protection.• Show how to use and care for webbing.• Review the above equipment and skills.• Get an introduction to rock climbing shoes; get a shoe fitting if possible.• Review and learn about the protection equipment needed for lead climbing.• Practice the knots for climbing, rappelling, belaying, and anchors.• Learn about the different types of anchors.		7:25 p.m.
Breakout Groups 15 minutes	<ul style="list-style-type: none">• Practice harnessing, helmeting, shoeing, and having Scouts check each other to make sure gear is put on correctly.• Have a station with a mock setup of a climbing area.		8 p.m.
Game 10 minutes	Play Shape Shifters (described earlier).		8:15 p.m.
Closing 5 minutes	Announcements Leader's minute Closing		8:25 p.m.
Total 90 minutes of meeting			
After the Meeting 15 minutes	Leadership team reviews plans for the next meeting and for the main event.		

*All times are suggested.



CLIMBING AND RAPPELLING

Meeting Plan: Climb On Safely and Knots



Week 2 Date _____

ACTIVITY	DESCRIPTION	RUN BY	TIME*
Preopening 15 minutes before meeting	<ul style="list-style-type: none">Display ropes and equipment as Scouts arrive, as well as rope logs if possible.Show Scouts how to inspect ropes and equipment for damage and excessive wear.		6:45 p.m.
Opening Ceremony 10 minutes	Flag presentation Oath and Law		7 p.m.
Group Instruction 25 minutes	<ul style="list-style-type: none">Present an overview of Climb On SafelyEnsure that all members understand each of the eight points.		7:10 p.m.
Skills Instruction 25 minutes	<ul style="list-style-type: none">Learn and practice the figure eight, water knot, and safety knot.Review the above knots.Learn the use of the equipment for anchorsLearn and practice the following the barrel knot and fisherman's knotReview the above knots.Learn and practice the Prusik knot.		7:35 p.m.
Breakout Groups 15 minutes	<ul style="list-style-type: none">Begin group planning for participation in main event, including menus.Review members' advancement status.		8 p.m.
Game 10 minutes	Play Knot Relay (described earlier).		8:15 p.m.
Closing 5 minutes	Announcements Leader's minute Closing		8:25 p.m.
Total 90 minutes of meeting			
After the Meeting 15 minutes	Leadership team reviews plans for the next meeting and for the main event.		

*All times are suggested.



CLIMBING AND RAPPELLING

Meeting Plan: Climbing and Protection



Week 3 Date _____

ACTIVITY	DESCRIPTION	RUN BY	TIME*
Preopening 15 minutes before meeting	Show the video "Nine Lessons From Rock Climbing" from www.ted.com .		6:45 p.m.
Opening Ceremony 10 minutes	Flag presentation Oath and Law Uniform inspection		7 p.m.
Group Instruction 10 minutes	<ul style="list-style-type: none">• Explain and demonstrate the different techniques for climbing.• Discuss top roping and lead climbing and rappelling.• Use diagrams or photos as examples.		7:10 p.m.
Skills Instruction 40 minutes	<ul style="list-style-type: none">• Learn the commands between climber and belayer.• Learn proper belaying technique.• Set up a basic belay system on the floor, and practice as if climbing.		7:20 p.m.
	<ul style="list-style-type: none">• Review climber commands and belaying techniques.• Learn how to set a three-point anchor safely.		
	<ul style="list-style-type: none">• Review the above skills.• Learn the principles of lead climbing.• Discuss where and when one should use nuts, hexcentrics, or cam devices.		
Breakout Groups 15 minutes	<ul style="list-style-type: none">• Review advancement requirements related to climbing and rappelling.• Determine what requirements members will still need to compete for badges, such as the Climbing merit badge, after the main event.		8 p.m.
Game 10 minutes	Play Ground Belay Relay (described earlier).		8:15 p.m.
Closing 5 minutes	Announcements Leader's minute Closing		8:25 p.m.
Total 90 minutes of meeting			
After the Meeting 15 minutes	Leadership team reviews plans for the next meeting and for the main event.		

*All times are suggested.



CLIMBING AND RAPPELLING

Meeting Plan: Rappelling



Week 4 Date _____

ACTIVITY	DESCRIPTION	RUN BY	TIME*
Preopening 15 minutes before meeting	Challenge each Scout on arrival to tie a one-handed bowline.		6:45 p.m.
Opening Ceremony 10 minutes	Flag presentation Oath and Law		7 p.m.
Group Instruction 5 minutes	<ul style="list-style-type: none">• Discuss rappelling commands and the relationship between the rappeller and the belayer.• Discuss how climbing and rappelling commands differ.		7:10 p.m.
Skills Instruction 45 minutes	<ul style="list-style-type: none">Learn and practice rappelling skills:<ul style="list-style-type: none">• How to tie in• Different braking devices• Going over the edgeReview the above rappelling skills.Learn how to belay a rappeller. <ul style="list-style-type: none">Review the above rappelling and belaying skills.Learn how to ascend a rope using the Prusik knot or ascending device.		7:15 p.m.
Breakout Groups 10 minutes	<ul style="list-style-type: none">Finalize plans for participation in the main event.Determine what advancement requirements can be completed during the main event.		8 p.m.
Game 15 minutes	Play "What Am I?" (described earlier).		8:10 p.m.
Closing 5 minutes	Announcements Leader's minute Closing		8:25 p.m.
Total 90 minutes of meeting			
After the Meeting 15 minutes	Leadership team reviews plans for the next meeting and for the main event.		

*All times are suggested.



CLIMBING AND RAPPELLING

Main Event: A Trip to an
Indoor Climbing Gym



Date _____

Logistics

Location: _____

Departure time: _____

Return time: _____

Duration of activity: 4 to 6 hours

Budget: Completed _____ Approved _____

Camping: Duty roster _____ Menu _____

Transportation: Group _____ Self _____

Tour and activity plan: Completed _____ Submitted _____

Essential (Tier I)

Get beginning climbers started by visiting a local climbing gym, rock wall at a camp, or a similar outdoor site. Spend several hours practicing basic skills and developing confidence.

Equipment List

- Trained climbing consultant
- Appropriate clothing
- Sack lunch
- Money for gym fees
- Signed waivers for gym
- Climbing gear (if not supplied by gym)
- Cell phones as appropriate for safety

Activity

- Meet for transportation to climbing location.
- Upon arrival, check in to climbing facility.
- Receive orientation, and learn gym safety rules.
- Work with the climbing consultant to learn climbing skills.
- Enjoy a day of climbing.
- Return home.
- Follow up with the appropriate thank you notes.

Safety

While climbing does present safety risks, training in proper technique and adherence to the rules can eliminate most dangers. Horseplay of any kind cannot be tolerated. For the safety of others, those who do not follow the rules must be removed from the activity.

Notes

Look for a climbing gym that adheres to the standards of the Climbing Wall Association.



CLIMBING AND RAPPELLING

Main Event: Outdoor Climbing



Date _____

Logistics

Location: _____

Departure time: _____

Return time: _____

Duration of activity: Weekend

Budget: Completed _____ Approved _____

Camping: Duty roster _____ Menu _____

Transportation: Group _____ Self _____

Tour and activity plan: Completed _____ Submitted _____

Challenging (Tier II)

Go to a previously selected natural climbing and rappelling area and camp overnight. Choose a safe place to have trained consultants assist you in the different aspects of the activity such as setup, instruction, group management, and the climbing and rappelling activity. Routes should range from easy to challenging to meet the varying skill levels of the group.

Equipment List

- Trained climbing consultant
- Personal climbing gear (helmet, harness, appropriate shoes)
- Group climbing gear (ropes, webbing, anchors, belaying devices, etc.)
- Group camping gear
- Personal camping gear
- Water
- Scout Basic Essentials (Review the list and take what you need.)
- Meal plan and food
- First-aid kit
- Cell phone for emergency communication

Activity

- Choose a safe local climbing area.
- Plan to camp nearby.
- Travel to camping area.
- Demonstrate good camping skills.
- Arrive at climbing area and receive safety orientation from trained consultants.
- Assist with setup as appropriate to skill levels.
- Learn and practice good climbing and rappelling techniques.
- Focus on safety.
- Take down climbing equipment and clean area.
- Travel home.

Safety

All climbing participants must follow climbing rules at all times. Climb On Safely procedures should be learned prior to arriving at climbing and rappelling location. Only those participants with appropriate skills should assist with setup of climbing routes, and their work must be checked and approved by trained and qualified climbing consultants. Participants should never attempt climbing activities beyond their skill levels.

Notes



CLIMBING AND RAPPELLING

Main Event: Climbing Competition



Date _____

Logistics

Location: _____

Departure time: _____

Return time: _____

Duration of activity: 4 hours or overnight

Budget: Completed _____ Approved _____

Camping: Duty roster _____ Menu _____

Transportation: Group _____ Self _____

Tour and activity plan: Completed _____ Submitted _____

Advanced (Tier III)

Compete in an organized climbing competition. Most often held at indoor climbing facilities, these competitions usually include lead, speed, and bouldering contests. Choose an event that is appropriate for your group's skill level. This is a great activity for the group when competing as a team. Units that have a high skill level could sponsor their own event with appropriate supervision and support.

Equipment List

- Trained climbing consultant
- Entry form for competition with appropriate signed waivers
- Personal climbing gear (harness, shoes, helmet)
- Competition climbing gear (if putting on your own event)
- Nutritious meals for competition
- Camping equipment, if staying overnight

Activity

- Find an appropriate climbing competition.
- Train for the event using safe climbing practices.
- Travel to event venue.
- Camp or lodge as appropriate
- Go through a safety orientation of climbing venue.
- Assist with climbing competition according to skill level.
- Compete as a team or as individuals.
- Demonstrate good sportsmanship.
- Assist in cleaning up after the event.
- Travel home.

Safety

All climbing participants must follow climbing rules at all times. At this level, Climb On Safety procedures should be well-known to all participants. Only those participants with appropriate skills should assist with setup of climbing routes, and their work must be checked and approved by trained and qualified climbing consultants. Only units with a great amount of skill and experience should consider creating their own climbing competition.

Notes

Local climbing gyms and outdoor shops should be able to help you identify climbing competitions in your area.



RESOURCES AND REFERENCES

Books

Climbing merit badge pamphlet

Climb On Safely

Passport to High Adventure

Topping Out: A BSA Climbing/Rappelling Manual

The Mountaineers. *Mountaineering: The Freedom of the Hills*. Mountaineers Books, 2010.

Websites

Black Diamond Equipment

Website: <http://blackdiamondequipment.com>

Climbing Wall Association

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

Petzl

Website: <http://www.petzl.com/us/outdoor>

Rockclimbing.com

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

Triple Crown Bouldering

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

USA Climbing

Website: <http://usaclimbing.net>

Related Program Features

Camping, Cave Exploring, Outdoor

Ethics, and Sportsmanship