

What is Rock Climbing?

Rock climbing is a sport in which participants climb up or across natural rock formations. Participants climb for recreation, a connection to natural places, and for social interaction. The goal is to climb a predefined route up a rock formation without falling. Like hiking, rock climbing is a true, self-powered activity, but it is differentiated from hiking because climbers use their arms and hands to support their weight. Several different styles of climbing exist. In Ontario, the following three types of climbing are most popular:

Top-Roping – Before one begins to climb, an anchor is set up at the top of a route. A rope is run from the ground, through the anchor, and back down to the ground; the climber ties-in to one end of the rope and a belayer secures him/her from the other end. This is the type of climbing most people do when learning to climb and requires access to the top of the cliff.

Lead Climbing – In lead climbing, a belayer feeds out rope to the climber as he/she climbs. The climber repeatedly clips the rope through intermediate points to limit the length of a potential fall. Traditional lead climbing uses removable protection that follow continuous cracks in the rock; Sport Climbing uses fixed protection (bolted into the rock) to scale blank faces of rock.

Bouldering – Climbing on smaller rock formations (boulders) without the use of ropes. Bouldering mats (large, thick pads known as "crash pads") are placed at the base of the boulder for safety, and fellow climbers assist one another to land properly (this is known as "spotting").

In North America, hiking and climbing difficulty is measured on a scale called the Yosemite Decimal System that functions as follows:

- Class 1 to Class 3 generally refers to walking on an even, often planar surface through to steeper terrains that may involve some scrambling, increased exposure and a greater chance of injury, e.g. difficult trails.
- Class 4 can involve short steep sections where the use of a rope is recommended and un-roped falls could be serious, e.g. a steep, rocky hill.
- Class 5 is considered true rock climbing, predominantly on vertical or near vertical rock, and requires skill and a rope to proceed safely. Un-roped falls would result in severe injury or death.

History

In Ontario, climbing became a significant activity in the 1970s and continues to grow in popularity as a low impact, self-powered, outdoor activity. Although rock climbing was an important component of Victorian mountaineering in the Alps, it is generally thought that the sport of rock climbing began in the last quarter of the nineteenth century in various parts of Europe. Rock climbing evolved gradually from an alpine necessity to a distinct athletic activity. It has now been recognized as a sport by the International Olympic Community and was included as a medal event in the 2020 Olympic Games.



Where Does Climbing Occur?

In Ontario, climbing activity occurs on both Canadian Shield granite and Niagara Escarpment dolomite. Many climbers enjoy the close proximity of granite climbing areas in Eastern Ontario, such as Bon Echo and Kingston Mills, while the sheer volume of rock in Northern Ontario – in the Lake Superior region especially – offers numerous developed areas for climbers to explore. The dolomite of the Niagara Escarpment is close to many highly-populated areas, and is, therefore, an obvious and common destination for climbers. Rock climbing takes place on the escarpment from Niagara Falls all the way to Tobermory, with areas such as Niagara Glen, Rattlesnake Point, Old Baldy, and Lion's Head among the most popular. Ontario has become known to climbers around the world as a rock climbing destination and is featured in numerous magazines and films.

Who Climbs?

The demographics of the rock climbing community are, generally speaking, quite broad, varying widely in terms of age, religious activity, political affiliation, and socio-economics. That said, a 2021 OAC survey found that, in Ontario, the average outdoor climber was male, between the ages of 26-35, with an average income of between CAD\$75,000 to CAD\$100,000. Ontario climbers typically have an above-average level of education as well as income and are likely to travel both in Canada and abroad to climb. Participants of the OAC survey indicated that the primary reasons they rock climb are for the personal challenge and to connect with nature. Climbers make a significant economic contribution to local tourism many areas. There are an estimated 10 million climbers living in North America.

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Is it Safe?

Movies, magazines and other media portray climbing as a thrill-seeking, dangerous activity. Unfortunately, this exaggerated depiction forms the basis for many people's impressions of the level of risk involved. In fact, climbers are, for the most part, experienced, prudent, and well-equipped for climbing outdoors. They are able to assess (and accept) any potential risks, as well as their own personal limits. Many climbers have the skills and/or equipment to rescue themselves, as well as other people. OAC surveys have repeatedly found that Ontario climbers were at least ten times more likely to be involved in the rescue of a hiker than to require rescue themselves.

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Research by the Access Fund and the OAC found no record of any legal action ever having been filed in which an injured climber successfully sued a landowner or an agency on the basis of liability. This is a result of the broad liability limitations that are provided for landowners, land managers, and agencies that permit and provide for recreation opportunities such as climbing.



What Kind of Equipment is Used?

Different types of climbing require different kinds of equipment. However, special shoes and chalk are used almost universally to improve adhesion to the rock. Ropes, harnesses, carabiners and belay devices are used to prevent falls and ensure the safety of climbers. Advances in technology and the establishment of international safety standards and testing have resulted extremely strong and reliable equipment.

A popular question asked by non-climbers is "what happens if you fall"? Falling is a safe and normal part of rock climbing. During a fall, the climber's weight is simply absorbed by the stretch in the rope, which is held taught by the belayer.

What About the Environment?

Some of the top research on the environmental impacts of climbing is carried out right here in Ontario. Research has repeatedly shown that climbing routes have half the plant richness of unclimbed cliffs. These studies have given climbers an unfavourable reputation by many concerned individuals and led to the closure of many climbing areas. After sampling 20 different cliff faces, leading researchers, Kathryn Kuntz and Doug Larson at the University of Guelph, Ontario, uncovered the fatal flaw in these early studies - they had neglected to test whether cliffs that climbers chose to climb actually had less vegetation to begin with. Kuntz and Larson deduced that if climbing destroyed vegetation they would see signs of damage in crevices and ledges that normally support plant life. They found none.

"What the plants are looking for is what climbers don't want," says Larson. Plant roots break up the rock, making climbing perilous. So rather than climbers damaging the ecology of the rock face, they select bare cliffs in the first place, Larson believes."

The study also advises that recommendations made by land managers to restrict development of new climbing routes should be re-evaluated.²

Rock climbers can make excellent stewards for climbing areas because they return repeatedly to the same locales and often develop a deep appreciation for the location, and promote this to others. OAC Climbers surveys show that over, 85% of respondents climb for "a connection with nature." All published guides to rock climbing in Ontario contain sections, authored by Dr. Pete Kelly and Dr. Doug Larson from the University of Guelph Botany Department, dedicated to ensuring that climbers understand the environmental considerations of climbing on the escarpment. Nevertheless, like any human activity, climbing does have an impact, and as a result the OAC encourages climbers adhere to "minimal impact" and "leave no trace" practices.

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¹ "Rock climbers not guilty of destroying plant life", 01 July 2006, New Scientist

² "Influences of microhabitat constraints and rock-climbing disturbance on cliff-face vegetation communities" Kuntz, KL; Larson,



Climbing Management

Climbing presents unique management challenges due to lingering misconceptions, the equipment used, the different forms of climbing activity, and the diversity of environments where climbing takes place. Strategies for management of climbing will depend on many factors, including whether the land is public or private, the mission of the agency or land manager, and staffing or budgetary resources. Each natural area is unique, requiring land managers to exercise discretion in managing recreational activities. Developing a Climbing Management Plan is an effective way for land managers to oversee climbing on both public and private lands.

A successful Climbing Management Plan will:

- Build cooperative relationships between climbers and resource managers.
- Provide management direction that is the minimum necessary to protect resources and is implemented on a graduated scale from indirect measures (e.g. education) to direct measures (restrictions).
- Satisfy statutory requirements and internal agency guidance (where applicable).
- Provide information about status and contextual importance of resource values, climbing
 activity and provide information about contextual use patterns, and effects of climbing activity
 on identified resource values.
- Articulate climbing as a recreational experience, and describe the variety of climbing opportunities as values.
- Identify management alternatives that address climbing impacts in a manner that is consistent with how other recreation groups are managed.

Climbers' compliance with different land management plans is generally good in areas where management priorities are well publicized and there have been opportunities for public involvement in development of management policy. Poor compliance often arises in situations where there has been limited communication between climbers and resource managers, where management policies show poor understanding of climbing activity and use patterns, or where new restrictions have been implemented without the identification of problems through field observation.

Climbers give back to their local trail and park systems by volunteering on public land, protecting the environment, and preserving open space. For example, the Shawangunks of New York – one of the most renowned climbing sites in the U.S. – is owned and managed by the Mohonk Preserve as part of a 7,000 acre nature preserve. The Nature Conservancy owns climbing sites in Utah and Connecticut. In Colorado, the Access Fund owns and manages the Golden Cliffs Preserve, an open space preserve that offers hiking and climbing, in additional to several other climbing areas.

About the OAC

The Ontario Alliance of Climbers (OAC) is an incorporated, volunteer, non-profit group that works with landowners, conservation authorities, property managers and members of the climbing community to keep climbing and bouldering areas open in an environmentally responsible manner. The OAC has over 2,500 individual and corporate members and is growing daily.



We encourage our members to follow a code of ethics characterized by our focus on environmental stewardship, resource protection, and risk management. We put our principles into practice through our partnership with Leave No Trace Canada and volunteer-run events common throughout the year, including: clean-up days, invasive plant species removal, tree planting, and other activities. These stewardship activities take place on climbing lands and is our broader communities' way of supporting and working alongside Land Managers. The OAC currently has strong active working relationships with a number of Land Managers, including Bruce Peninsula National Park, Grey Sauble Conservation Authority, Halton Region Conservation Authority, and the Niagara Parks Commission.

If you are a Land Manager looking for guidance on how to best manage climbing activities on your land, the OAC can help open communication with the climbing community, explore management and funding options, and offer consultations regarding best practices for managing climbing activities. To find out more about rock climbing in Ontario please contact us at info@ontarioallianceofclimbers.com

Glossary of Terminology:

"Route," the line of travel up the cliff or mountain. This zone is typically 6 to 8 feet in width, follows a line that may be straight or very irregular, depending upon the climbing terrain, and will extend from the base to the summit.

"Anchor," Any piece of protection used to secure climbers to a cliff face for belaying or rappelling. Most are removable.

"Fixed anchors" are left in place permanently for all climbers to use.

"Belay" or "belaying," The method by which one climber secures the rope to safeguard another climber in the event of a fall

"Carabiners," These are snap-links, generally of aluminum alloy, used to connect a climber's rope to intermediate protection and anchors.

"Protection," Any form of anchor removable or fixed used between belays to protect a climber.