## ROCK CLIMBING MANAGEMENT IN GATINEAU PARK, QUEBEC, CANADA: A CASE STUDY

Paul Heintzman University of Ottawa 125 University Drive Ottawa, ON K1N 6N5 Canada pheintzm@uottawa.ca

## Abstract

Rock climbing is a popular recreation activity that often occurs in parks and protected areas. Management of climbing in these areas is controversial as there is debate as to how to best manage the activity in a way that minimizes negative impacts upon the protected area's ecosystem. Management approaches include banning or restricting climbing activities and educating climbers. This paper uses a case study approach to investigate the current management actions related to rock climbing in Gatineau Park, Quebec that have arisen out of the preparation and approval of the 2005 Master Plan for the park nearly 10 years ago. Results indicate that the initial preparation of the 2004 Preliminary Master Plan used a rather rational (expert-driven) approach to make decisions regarding rock climbing in the park. Since approval of the 2005 Master Plan the planning approach has become more transactional (participatory) as climbers have been consulted and agreements have been established between the park management and climbing organizations.

#### **1.0 Introduction**

Management of rock climbing activities in parks and protected areas is a complex and highly debated subject. There are increasing concerns about the impact of climbing upon natural environments in parks and protected areas. Climbing impacts include social impacts, damage to historic and cultural sites, noise, harassment of wildlife, littering, human impacts on soils, and damage to vegetation (Attarian, 2003). While one approach to address these impacts is for park and protected area managers to prohibit or restrict climbing activities, an alternative approach is for managers to work cooperatively with climbers to implement management practices that minimize damage caused by climbing activities (Attarian, 1991; Attarian & Keith, 2008). Examples of cooperative actions may include education initiatives and climbing site rehabilitation.

#### 2.0 Purpose

The purpose of this paper is to provide an overview of recent climbing management actions in Gatineau Park, Quebec. Hopefully an understanding of these management actions, and the positive and negative responses to them, may provide some insight to those involved in the management of climbing activities in other protected areas in order to simultaneously provide climbing opportunities and avoid ecosystem degradation.

### 3.0 Method

This study utilized a case study approach where one case, i.e., management of rock climbing in Gatineau Park, was intensively investigated to obtain insights that might be helpful in other similar cases, i.e., to the management of rock climbing in other parks (Henderson & Bialeschki, 2002). I collected data through a review of existing documents (Stake, 1995) available online or from the National Capital Commission. Specifically, the study involved a critical review using content analysis of documents related to the management of rock climbing in Gatineau Park. Park staff involved in the management of rock climbing were also contacted to answer questions and clarify issues. In addition, documents other than park planning documents such as media documents and climber websites were reviewed. In a sense, these documents, acted as surrogate observers with expertise in a specific area (Stake, 1995).

#### 4.0 The Context: Gatineau Park

An understanding of the Gatineau Park context is necessary in order to understand issues related to rock climbing management within the park. Gatineau Park is managed by the National Capital Commission (NCC), an agency of the Canadian federal government. Located just a few kilometers from the Parliament Buildings in Ottawa, Canada, Gatineau Park protrudes into the National Capital Region, Canada's fourth largest urban community, with a population of more than one million people. The park is increasingly surrounded by new urban neighborhoods. Thus the park is a classic example of a park confronted by management issues related to the wildland urban interface including ecological-recreation conflicts (Heintzman, 2010).

The Park contains 36,300 hectares of forested and hilly terrain within the Canadian Shield and stretches over 50 kilometres in length (NCC 2005b). The range of natural habitats in the park provides for a rich biodiversity including exceptional forests, 50 lakes and hundreds of ponds. The wildlife includes 230 bird species and 50 mammal species, such as deer, black bear and wolf. During the nesting season 350,000 birds nest in the park. In terms of fauna, there are 1,000 plant species, of which 121 are endangered—the largest concentration of rare species in the province of Quebec.

Climbing in Gatineau Park occurs on sites along the Eardley Escarpment. This escarpment lies along a geological fault line which marks the south-east boundary of the Canadian Shield (GENIVAR, 2011; NCC, 2005b). The escarpment's 300 metre cliffs are

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not only unique to the region but also create a hot and dry micro-climate with a number of southern ecosystems and plant species (e.g., white oak). The escarpment is home to old-growth forests, plants at the northern edge of their distribution, and species at risk that are legally protected under federal or provincial endangered species legislation. The escarpment is both the richest and most fragile of Gatineau Park's ecosystems and is located within the park's integral conservation zone. Thus the escarpment's ecosystem is very vulnerable to activities such as climbing. According to the NCC, there were approximately 200 to 300 climbers in the park in the 2008 to 2010 time period (Catherine Verreault, personal communication, 21 June, 2013).

The National Capital Commission developed the first Master Plan for the park in 1980, followed by a second Master Plan in 1990. The 1990 Master Plan featured Gatineau Park as the "Capital's natural park" and emphasized a balance between conservation and recreation. In 2001, the NCC began a review of the 1990 Master Plan for the park and a Preliminary Master Plan for the period 2005-2015 was unveiled in October 2004 (Del Degan, Massé et Associés Inc., 2004). Following public consultation and some modifications to the Preliminary Master Plan, the NCC approved the new Master Plan in May 2005 (NCC, 2005b). The new plan sets aside a larger area of the park as having a conservation priority, emphasizes respectful activities, and increases conservation activities to protect the natural environment. The park will be managed primarily for conservation and then for recreational use. The management of rock climbing needs to be seen within the context of an overall debate between recreational use versus conservation within the park and a shift from a "nature park" with a balance of conservation and recreation park" with a focus on conservation first, then recreation.

#### 5.0 Evolution of the Issue

The current management actions related to rock climbing in Gatineau Park arise out of the preparation and approval of the 2005 Master Plan for the Park. In this section of the paper I will review the key developments in the evolution of management of rock climbing within the park since 2004.

## 5.1 Preliminary Master Plan, 2004

Due to 17 environmentally sensitive species found in areas used by climbers, the Preliminary Master Plan would have placed an immediate ban on rock climbing for three years while a conservation plan was developed. The proposed ban on rock climbing, along with a proposed ban on snowmobiling, received the most attention at public meetings in 2004 and also the greatest number of documents submitted by organizations (Heintzman, 2010). Rock climbers argued to have continued access to a section of the sensitive Eardley Escarpment, which contains the best rock climbing in the Ottawa area and according to the chair of the Ottawa section of the Alpine Club of Canada (ACC), is "really the only place to climb in the Ottawa area" (CBC, 2004). The climbers argued that they had been climbing in the park for over 50 years, and that park officials had not worked with the climbers to come up with a compromise similar to the ones that have been established in other sensitive areas such as the Niagara Escarpment in Southern Ontario. They claimed their activities had minimal impact as they do not use motorized activity, but only their hands and feet. An ACC spokesperson stated that "The impact of certain activities has been exaggerated" [people have been climbing in the park for a half-century] "and suddenly we find ourselves being told we're undesirable. Naturally, we're extremely insulted" (Drolet, 2004, p. B2) In contrast, quoting scientific studies on the effects of rock climbing upon plants in areas such as the Niagara Escarpment, the Canadian Parks and Wilderness Society stated that rock climbing along Gatineau Park's Eardley Escarpment had led to the destruction of the escarpment's fragile microsystem (How, 2002).

The NCC's *Consultation Report* on the Gatineau Park Master Plan Review process enumerated the reasons put forward during the public consultation against the proposal to prohibit rock climbing on the Eardley Escarpment until a conservation plan had been developed and implemented (NCC, 2005a):

- a lack of scientific justification and research on the actual impacts of climbing upon the escarpment ecosystem which was believed to be minimal compared to other activities.

- the limited area of the escarpment (estimated to be about 3% by some climbers) affected by climbing.
- the pro-environmental awareness that many climbers claimed to have.
- the health benefits of climbing.
- the ecotourism dimension of climbing activity that creates beneficial economic spin-offs for the region.

- the strategic location of the escarpment close to the National Capital Region and the absence of alternative rock climbing sites in the region.

- the traditional and historical value of rock climbing that has existed for over 50 years in the park.
- the willingness of rock climbing organizations to work with the NCC in providing information on the escarpment ecosystems, as well as user education, supervision and self-regulation.
- a ban on climbing could encourage informal use of the escarpment for climbing.

A 250-name petition submitted by the Gatineau Access and Conservation Working Group advocated the involvement of climbers in the control of the activity and the removal of the ban until other solutions could be implemented. Some participants in the consultation process did agree with the proposed climbing ban due to the sensitive nature of the escarpment ecosystem and the conservation orientation of that sector of the park. In its submission, the Ottawa Section of the Alpine Club of Canada (ACC) acknowledged that climbing has an impact on the escarpment's ecosystems, that rock climbing should be treated as a recognized activity, that the NCC should manage the park according to environmental standards and legislation but that it should adopt a balanced approach that considers access as well as environmental protection. The submission also stated that the ACC should

represent the rock climbing community on an ongoing basis in discussions with the NCC, in order to ensure use of the escarpment that is environmentally responsible.

#### 5.2 Master Plan, 2005

In general, the planning process for the 2005 Gatineau Park Master Plan has been characterized as more rational than transactive (Heintzman, 2010). Rational planning, or an expert method, involves professional planners who determine goals and objectives along with the alternative strategies to attain them, select the "best" strategy, and then monitor goal accomplishment (Harshaw, Kozak, & Sheppard, 2006; Payne & Graham, 1993). In contrast, transactive planning, or a participatory method, provides stakeholders or "affected publics" with opportunities to participate throughout the various stages of the planning process (Harshaw et al., 2006; Payne & Graham, 1993). For example, the limits to acceptable change (LAC) planning framework is characterized by transactive planning as it provides for plenty of opportunity for the public and interest group representatives to participate in decision-making and subsequent monitoring due to the knowledge they have and the legitimate claim they hold (Payne & Graham, 1993). As the LAC framework seeks consensus rather than determining the "best" alternative with respect to an agency's goals, it is characterized by shared information, knowledge, power and rewards (Payne & Graham, 1993). The advantages of transactive planning include the generation of innovative ideas by citizens; the opportunity to test possible management actions; the validation of technical data; the development of ownership of, or responsibility for, a plan by the affected community; and the opportunity to develop consensus for a plan and its implementation (Eagles & McCool, 2002).

Although the preparation of the 2004 Preliminary Master Plan tended to be characterized by a rational planning approach, the rock climbers, unlike some other recreation activity groups, were able to achieve a compromise in the approved 2005 Master Plan, reflective of a more transactive approach (Heintzman, 2010). In response to the climber's feedback on the Preliminary Master Plan, instead of banning rock climbing for three years, climbing on the Eardley Escarpment was to be significantly reduced to assist in the protection and regeneration of the escarpment's natural ecosystems. Climbing would be restricted until a Natural Resources Conservation Plan was developed and in the meantime park officials would work with climbing groups to ensure the protection of the escarpment. Shortly after the adoption of the master plan, the NCC and the Gatineau Park Climbers' Coalition reached a short-term agreement on the sites where rock climbing would be allowed. Rock climbing would be permitted on 22 sites, not permitted on four sites and not permitted on sections of three other sites (NCC, 2006). The NCC published and distributed a pamphlet titled "Restrictions on Rock Climbing in Gatineau Park" that described the short-term agreement and outlined the restrictions on climbing (NCC, 2006).

#### 5.3 Ecosystem Conservation Plan, 2010

The Ecosystem Conservation Plan for Gatineau Park was released in February of 2010 (Del Degan, Massé et Associés Inc., 2010). This Conservation Plan was completed by the same consulting company that had completed the Preliminary Master Plan in 2004. This plan used the criteria of scarcity, fragility and representativeness to evaluate the flora, fauna, habitats, and ecosystems of the park. The plan noted that 475 climbers were observed climbing on the Eardley Escarpment, most of them on the six walls open during that time, during the summer of 2007. Citing several research studies the plan also noted six types of major effects of climbing upon the escarpment ecosystem: reduction of plant and animal species richness; reduction of plant cover; ground erosion through compression, displacement, degradation, and the creation of depressions; erosion of cliff walls that showed signs of nicking, cracking and chalk traces; changes in the composition of plant species including issues related to abundance, age structure, and invasive species; and loss of habitat to exposed rock, degradation and reduction of surface material suitable for certain species such as Virginia creeper. Overall the major impact has been reduction in species richness and biodiversity which may potentially be irreversible and lead to the disappearance of certain species. The plan noted that there was a correlation between the level of difficulty of walls used and the impact of climbing upon the vegetation. This plan went on to make the following four recommendations in regards to climbing in the park:

- Identify two or three walls for climbing, based on ecosystem impact, their level of degradation and their popularity
- Modify the conservation zone to make the walls accessible to climbers
- Restore the walls not selected for climbing
- Monitor the environmental impact of climbing activities

## 5.4 Ecological Evaluation and Identification of Rock Climbing Sites, 2010

Also in February of 2010, the National Capital Commission released a 259 page study titled *Ecological Evaluation and Identification of Rock Climbing Sites to be Retained in Gatineau Park* completed by GENIVAR, an engineering consulting firm (GENIVAR, 2010). This study assessed eight of the most popular rock climbing sites in the park in order to select sites where climbing could continue and to propose a strategy for the rehabilitation and restoration of these climbing sites. The project objectives for this study were as follows:

- Help to restore the integrity of the Eardley Escarpment natural ecosystem.
- Protect flora and fauna species at risk at or near the rock climbing sites.
- Reduce the erosion and trampling of fragile habitats associated with rock climbing activities.
- Channel rock climbing activities by limiting the number of designated climbing faces to two or three, pursuant to the Gatineau Park Ecosystem Conservation Plan. (GENIVAR, n.p.)

The scientific methodology used to evaluate the eight rock climbing sites was based on 17 criteria that were grouped into four categories: ecological value, deterioration level, conservation and rehabilitation potential, and the recreational value of each rock

face. The criteria considered for closing a rock face were as follows: occurrence of endangered plant species associated with the Eardley Escarpment (a very significant criteria), little damage to the rock face, high potential for conservation or restoration, and relatively infrequent use by climbers. The criteria for retaining a rock face for climbing were: frequent use by climbers, existing damage to the rock face by climbing activities, sites which would experience the least fragmentation or loss of habitat if climbing continued, and fewer significant ecological elements.

This study concluded that four walls at two sites with 43 routes remain open for climbing while the remaining walls, sites and routes be closed and re-naturalized. The study also recommended that the sites to remain open would require special rehabilitation. The study report concluded with the following statement: "The decision to maintain certain rock climbing faces demonstrates NCCs willingness to allow rock climbing...but implies significant investment, which calls for cooperation with stakeholders. In the future, the NCC could eventually consider...the number of rock faces available." (n.p.)

### 5.5 Climber Reaction to the Ecosystem Conservation Plan, 2010

Climber reaction to the Ecosystem Conservation Plan was not entirely positive. While many climbers believed that the temporary agreement between the Ottawa-Gatineau Climbers' Access Coalition and the NCC was successful, some of the climbing community was surprised when the NCC revealed its Ecoystem Conservation Plan for Gatineau Park (CBC, 2010; Lewis, 2010). The following was posted on the Ontario Climbing website:

In March 2010, the National Capital Commission (NCC) released a land management plan for Gatineau Park which restricts climbing to the Western CWM west (North wall to Cave wall), Home Cliff west, Twin Ribs and Eastern Block. The NCC moved forward by installing No-Access signs, in late May at the majority of the climbing sites recognized in the previous access agreement. In addition, access to the Shrine parking lot on Chemin de la Montagne was removed.

To address the closures the Ottawa-Gatineau Climbers' Access Coalition (OGCAC) submitted a climbing management plan to the NCC. The scope of the plan was created to meet the ecological concerns raised by the NCC while maintaining access to climbing on the Eardley escarpment. This plan was endorsed by the Canadian Parks and Wilderness Society. Unfortunately, the NCC largely rejected the plan.

On August 17, the OGCAC members gathered to vote on how to move forward. It was decided not to endorse the NCC response and that the OGCAC will maintain its position outlined in the management plan. Sadly, the limited success in securing climbing access in the park puts 60 years of Gatineau climbing at a crossroads. (Ontario Climbing, n.p.)

#### 5.6 Agreement with Alpine Club of Canada, April 2011

While the Ottawa-Gatineau Climber's Access Coalition did not renew their agreement with the NCC a new agreement was reached with the 800 member Ottawa Section of the Alpine Club of Canada. This agreement covered the following topics: locations for rock and ice climbing; communication procedures; monitoring of sites; enforcement; increased ACC volunteer involvement in maintenance, improvement, and preservation; and insurance issues. The agreement specified that climbing was permitted at five sites that had a total of 64 routes of all difficulty levels.

Subsequent to the release of the Ecological Evaluation and Identification of Rock Climbing Sites report in 2010, the NCC published and distributed a pamphlet titled Rock Climbing in Gatineau Park (NCC, n.d.). This pamphlet addressed the following topics: The Capital's Conservation Park; Rock Climbing on the Eardley Escarpment; Where is Rock Climbing Permitted; Your Safety, Your Responsibility; Code of Conduct; and a contact for further information. This pamphlet specifies the five rock faces where climbing is permitted.

### 5.7 Restoration Plan 2011

In December of 2011, the National Capital Commission released a 145 page report titled *Assessment and Restoration Plan for Eardley Escarpment Degraded Sites in Gatineau Park* (GENIVAR, 2011). The preparation of the report included two meetings with designated climbing community representatives to obtain their recommendations. The first meeting was to provide the climbing representatives with an opportunity to discuss the management options for the climbing walls. The meeting involved visiting five climbing areas to identify situations that required management, presentations of management options that had been developed by the consulting company in consultation with the NCC, and obtaining climbing representatives' preferences concerning the management options or suggestions for new options. The preferences were taken into consideration in the selection of the management options for the climbing sites and where possible the climbers' points were incorporated into the site management proposals. The purpose of the second meeting was to present and discuss the management options recommended in the draft report with the climbing community representatives.

The assessment criteria used in the restoration plan methodology to characterize the climbing sites was the level of disturbance of each site. In order to develop restoration and management options, conditions at the climbing sites were placed into six categories of management responses: signage, restoration, species at risk protection, climbing site closure, erosion control, and site management. Restoration and management options were then developed, defined and characterized for each action type. Next, the options were used to develop management or restoration plans for sites closed to climbing and sites open to climbing. For each site, three restoration or management options were identified, with one option recommended. An overall cost for material and labour was then calculated for each site, with regard to the identified options.

The report developed specific management plans for the five climbing sites to remain open. All of these sites have been moderately or severely disturbed, and therefore require extensive management actions and in some cases urgent management action. The report recommended durable, simple and rustic infrastructure made of natural materials in order to retain a natural appearance of the site, limit the footprint on the natural environment, direct climbers, and protect the natural environments and associated wild plant and animal species that are at risk. It is estimated that the labour, materials and maintenance expenses for these management actions is less than that required by National Park standards for sites used by the general public. Finally, the rustic-type infrastructure satisfies the climbers' needs while not encouraging the average hiker to travel along the trails to the climbing sites.

The plan also outlined restoration plans for 30 sites and walls that have been closed to rock climbing. Generally these sites and walls are in good condition. As a result the restoration plans are focused on actions related to the closure of the climbing sites in a permanent fashion, to bring back a natural appearance to trampled areas, and to make the sites difficult to find and use.

Restoration work began in the summer of 2012. The work was completed through the use of climbing volunteers, park staff and private contractors. Approximately 30 climbers worked as volunteers on this restoration work in the summer of 2012 (Catherine Verreault, personal communication, 21 June, 2013).

# 5.8 Outdoor Activity Plan, 2012

During public consultation on the NCC's *Gatineau Park Outdoor Activity Plan* in January 2012, respondents made comments that recommended reopening or offering a larger number of rock climbing sites. In response the NCC wrote: "The NCC has heard the request to reopen a greater number of rock climbing sites...The NCC has shown flexibility and continues to interact with users. It wishes to reiterate its commitment to preserve the Escarpment's unique environment." (NCC, 2013, p. 26)

### 6.0 Discussion

According to Manning (Park Studies Laboratory, 2013) there are a multitude of ways that the potential impacts of outdoor recreation activities, such as climbing activities, can be managed in order to both protect park resources and the quality of the visitor experience. Limiting or prohibiting recreation use is only one of these strategies and not necessarily a very desirable strategy. Initially Gatineau Park management staff's intention, as revealed in the 2004 Preliminary Master Plan, was to eliminate climbing in Gatineau Park. This initial recommendation as part of the overall master planning process was characterized by a rational planning approach where the experts proposed the solution to the problem. At the 2004 public consultation meetings on the Preliminary Master Plan, climbers claimed that the NCC had not worked with them to develop a compromise. However, the rock climbers were able to achieve a compromise in the approved 2005 Master Plan that specified restrictions on climbing activities rather than a banning of climbing. Since 2005 there has been a softening of Gatineau Parks' position through more of transactional planning approach and compromises arrived at through the NCC working more co-operatively with climbers and climbing organizations than had been the case in the development of the 2004 Preliminary Master Plan. Although not all climbers have been satisfied with the NCC's management of the climbing areas, the NCC has been able to enter into agreements with rock climbing organizations-Ottawa-Gatineau Climber's Access Coalition and more recently the Ottawa Section of the Alpine Club of Canada—and also enlist the involvement of approximately 30 climbers to work as volunteers in the restoration of the climbing sites. A more transactive planning approach from the very beginning of the planning process for the 2004 Preliminary Master Plan may have established a better foundation for working collaboratively with climbers and the climbing organizations. While sophisticated natural science research has been incorporated into the Gatineau Park planning process for the management of rock climbing, more recreation oriented research such as that conducted by Manning and others (e.g., Park Studies Laboratory, 2013) would be beneficial in addressing issues related to the impacts of climbing and other outdoor recreation activities in this park setting.

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