



Appendix 1: Best Management Practices For Hang Gliding and Paragliding in Jasper National Parks

Name of Best Management Practice	Best Management Practices for Hang Gliding and Paragliding in Jasper National Park
Scope of Application:	<p>This Best Management Practices (BMP) document outlines the environmental management and mitigation measures for non-commercial Hang Gliding and Paragliding activities. Application of this BMP for this activity will be used to fulfill the environmental impact analysis requirements of <i>Parks Canada Interim Directive on Implementation of CEAA 2012</i>.</p> <p>Description:</p> <p>The proposed management approach to this activity is outlined in the <i>Guidelines for New Recreational Activities in Jasper National Park</i>. Only non-motorized forms of hang gliding and paragliding will be allowed. No motorized or towed launches will be permitted. Other key guidelines include:</p> <ul style="list-style-type: none">• Parks Canada will work with the Hang Gliding and Paragliding Association of Canada (HPAC) in order to develop best practices for paragliding and hang gliding in Jasper National Park. This will include measures to reduce user conflicts and wildlife disturbance. (This document is the result of that work.)• Parks Canada will work with HPAC to manage potential impacts to sensitive species (e.g. goats, caribou).• No new roads will be created to support hang gliding and paragliding.• Safety, risk and liability will be considered throughout the ongoing management of the activity. Parks Canada will work with HPAC to identify necessary safety measures.• Parks Canada will work with HPAC to manage potential impacts of the activity on other visitors and iconic viewscapes. <p>Parks Canada is also working with HPAC on the approach to implementing hang gliding and paragliding in Jasper National Park. As this is a new recreational activity and peer reviewed research on its impacts indicate that they can be more significant for alpine ungulates than existing activities, Parks Canada will be cautious in its approach and initially permit this activity on a two-year trial basis for personal use only (i.e. no commercial or special events permitted). During this time, pilots flying in Jasper will collect and report data on their activities to HPAC, who will provide it annually to Parks Canada. The data will provide Parks Canada with information on the nature and</p>



	<p>frequency of flights, will allow Parks Canada to evaluate the potential impacts associated with these activities, and will assist both organizations in providing better information to pilots interested in flying in the park in future.</p> <p>Based on the outcomes of the data collection program, the <i>Guidelines for New Recreational Activities in Jasper National Park</i> and this BMP may be reviewed and amended.</p> <p>Parks Canada is currently developing recovery strategies and action plans for several alpine species-at-risk in the mountain parks. This includes woodland caribou and whitebark pine, both listed as Endangered and both afforded the highest level of protection possible in Canada. The <i>Guidelines</i> and this BMP may be amended at a future date to make them compliant with Species-at-Risk requirements.</p>
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<p>Approved geographic area of application:</p>	<p>This BMP will be applied within Zones 2, 3, and 4 for the two year trial period (Phase 1) in Jasper National Park of Canada.</p>
<p>Exceptions:</p>	<p>For the duration of the 2 year trial period, hang gliding and paragliding flights will be permitted to launch and land at undesignated sites throughout Jasper National Park, but will not be permitted to launch or land in the following areas:</p> <ul style="list-style-type: none"> • Environmentally Sensitive Sites and Zone 1 areas: Edith Cavell Meadows, Pocahontas Ponds, Maligne Lake Outlet, Surprise Valley, Ancient Forest, Jasper House • Zone 5 - the Jasper townsite • Marmot Basin Ski Area • Roadways and associated rights-of-way (e.g. Highway 16, Icefields Parkway, Maligne Lake Road) • Within 30 m of any watercourses and their banks • Within 1000 m of active raptor nests and known mineral licks



Effects Assessment and Mitigation

Potential Key Effects:

Soil/Land resources:

- Exposure and erosion of soils
- Change in slopes, landforms, and landscape
- Soil compaction and rutting

Flora and Fauna:

- Loss of native plant cover and root systems
- Loss of plant diversity due to trampling
- Introduction of invasive or non-native plant species
- Damage to and/or removal of vegetation in immediate or adjacent areas
- Sensory disturbance causing displacement/habitat avoidance
- Damage to nests/disruption of nesting activity
- Disruption or disturbance of normal wildlife behavior patterns (with special emphasis on species vulnerable to disturbance: raptors, goats, sheep and caribou)
- Direct loss of availability and suitability of habitats

Visitor Experience:

- Distracted driving
- Visitor safety hazards
- Potential for conflict or negative visitor experience (e.g. perceptions of conflict with wilderness values and/or appropriate park uses)
- Potential to disturb or damage historic or heritage features



Mitigation Measures:

In addition to the mitigation measures described below, pilots are expected to comply with all laws and regulations set out in the *Canada National Parks Act*, and with all policies, guidelines, travel restrictions, area closures, and any other directives issued by Parks Canada or others for the purpose of mitigating environmental effects or ensuring visitor safety. On the ground, all pilots are subject to the same rules as other park users.

Pilots are expected to act as stewards, set proper examples, educate other visitors on the importance of keeping areas pristine, and ensuring that “leave-no-trace” ethics apply.

General

- Hang gliding and paragliding will be practiced according to industry/association standards and rules. It is the pilot's responsibility to know the free flight/vol libre specific rules. Check the Hang Gliding and Paragliding Association of Canada (HPAC) website (www.hpac.ca) for specific rules, as well as www.pc.gc.ca.
- HPAC membership is required to fly in Jasper National Park. Please maintain this membership or acquire temporary HPAC membership if you are a visitor to Canada. Please carry proof of membership when flying in the park.
- Emergency landings are permitted in accordance with Transport Canada and Parks Canada regulations. Please report emergency landings to Jasper Dispatch (780.852.6155) and to HPAC, as per the established HPAC protocol.
- During the trial period, HPAC and Parks Canada will be gathering data on flights in Jasper National Park. Please carry a GPS unit, record your flight path and the other information requested on p. 5, and provide this information to HPAC.
- Minimize any potential or real conflicts with other users. When in doubt, fly out and away from areas where other users may be.
- Before landing on a leasehold or an area held under a license of occupation, please obtain permission from the lessee or licensee.
- Exercise discretion when landing at Parks Canada facilities, such as picnic areas, campgrounds, and facility parking areas; avoid these areas during peak season and other busy times of the year.
- Limit flights to daylight hours.

Soils

- Use existing parking, staging areas, and official trails and routes to access areas for hang gliding and paragliding. Respect all area closures or restrictions.
- Avoid trail braiding, establishing new routes or trails, or altering launch and landing sites (e.g. removing woody debris or clearing vegetation). This is particularly important in high-use areas in the alpine and other fragile or sensitive environments.
- Minimize or avoid trail use during periods of high precipitation or when the soil is soft or wet.
- Please contact Jasper Dispatch (780.852.6155) to report soil disturbances or other problems.

Vegetation

- Use proper activity-based techniques (e.g. avoid dragging equipment or feet through vegetation) to minimize damage to sensitive vegetation such as alpine meadows, grasslands and riparian wetland areas.
- Make every reasonable effort to avoid introducing invasive weeds to new areas. Packs, flying gear, footwear and clothing should be checked and cleaned of seeds, burs and other plant parts prior to flying. Please bag seeds or burs and dispose of them in the garbage.
- Learn to identify invasive, non-native plants and report infestations (see <http://www.pc.gc.ca/eng/pn-np/mtn/feuveg-fireveg/veg-veg/envahisseurs-invasives.aspx> for more information).



Wildlife

- Avoid disturbing sensitive wildlife during take offs, landings and flights (e.g. nesting birds, mountain goats, woodland caribou).
- If wildlife is observed, fly away from the area immediately, especially during the spring season when many birds and mammals are especially sensitive to disruption. If in doubt, fly out and leave the area.
- Stay at distances sufficient to prevent changes to the behavior of animals (more than 1000 m line-of-sight is the default).
- Take immediate action to increase separation distances when animals react to gliders. Avoid activities during periods of the year when wildlife are under severe environmental and physiological stress, in particular during the winter survival and spring natality periods.
- Caribou are most sensitive to disturbance during hot summer weather. During this time they often stay on snow patches to avoid overheating and biting insects. Please avoid launching, landing, or flying near permanent snow patches.
- Follow the *Recommended Flight Guidelines for goat, sheep, and caribou ranges in Jasper National Park* (at <http://www.pc.gc.ca/eng/pn-np/ab/jasper/ne/survols-flight.aspx>).
- While in flight, allow birds (i.e. raptors) to fly with the glider and do not chase or otherwise harass them.
- Do not disturb nests and select access routes that are at least 1000 m from active nests.
- Dogs must be leashed and accompanied at all times.

Data Collection:

Environmental impacts, safety, risk and liability will be considered through the ongoing management of hang gliding and paragliding. Parks Canada will work with HPAC to identify the necessary measures to mitigate any potential impacts identified during the trial period. Flight information collected during the trial period will assist Parks Canada in managing this activity, by providing Parks Canada with information on the nature and frequency of flights, by allowing Parks Canada to evaluate the potential impacts associated with these activities, and by assisting both Parks Canada and HPAC in providing better information to pilots interested in flying in the park in future. The following data will be collected by HPAC and its members:

- Pilot name and contact info (e-mail or phone)
- UTM (NAD 83) coordinates for launch and landing site
- Track of flight path (UTM NAD 83 coordinates)
- Date, time of launch and landing time
- Weather conditions (esp. wind direction, wind speed)
- Flight rating (intermediate or advanced)
- Wildlife observations (approximate location and species)
- Other comments (e.g. hazards observed at launch or landing site, any incidents during flight or landing, any other information the pilot wants to pass on to Parks Canada)

HPAC will send the data collected to Amber Stewart, Land Use Planner for Jasper National Park (amber.stewart@pc.gc.ca; 780.852.6147) by November 1 in each of the pilot years.

Attachments:

1. Hang Gliding and Paragliding Areas closed to Launching and Landing – Jasper National Park
2. Recommended Flight Guidelines for Goat, Sheep, and Caribou Ranges in Jasper National Park

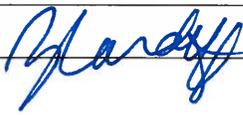


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Team of experts who took part in the development and review of the BMP		
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