

CMH WILDLIFE OPERATING PROCEDURES (WINTER)

The mountains in which we operate are home to a wide range of animal species. However, we also recognize that there are key species – because of the nature of their needs or the fact that they are classified as “rare” or “endangered” - that are of specific concern. These include mountain caribou, wolverine, mountain goat and grizzly bear.

It is our policy to minimize the potential direct and indirect impacts of our activities on all wildlife. This means ensuring that negative associations and impacts are avoided, and that animals can continue their normal habits – and continue to use necessary habitats - without disturbance. The following procedures are designed to assist us in meeting the following goal:

Our goal: to fly and ski in mountain ecosystems without displacing (*) key animals() from the habitats that they need to survive.**

**Displacement is defined as a detectable change of use from higher quality habitats to lower quality habitats, on a time scale of days to months and a spatial scale of hundreds of meters to several kilometers.*

***While these procedures are meant to address the needs of all wildlife species, we recognize that mountain caribou, mountain goats, wolverines and grizzly bears require special attention.*

These procedures are consistent with the BCHSSOA’s “*BEST PRACTICES FOR SUSTAINABILITY: STEWARDSHIP OF MOUNTAIN ECOSYSTEMS.*”

A.) WILDLIFE HABITATS

It is the responsibility of the area manager and assistant manager to ensure that all guiding staff and pilots in their area are aware of the key habitats where – based on previous observations and information gained from other sources (government, research, on-going inventories) – key wildlife species are, or may be commonly seen in the winter.

CMH will work annually with WLAP and/or MSRM to acquire new wildlife data, incorporate it into CMH mapping, and to ensure that managers, assistant managers and guides are made aware of it.

It is important that these habitats be discussed in morning and evening meetings to assist in planning for use of ski runs and flight paths.

B.) WILDLIFE OBSERVATIONS AND USE OF SNOWBASE

Maintaining an on-going program of wildlife observations is a key part of our role as stewards. *SnowBase* has become, and will continue to be the main tool that we will use to record, track and report these observations. *SnowBase* continues to be refined so that each data entry field provides useful information for these purposes.

It is the responsibility of the area manager and assistant manager to ensure that the use of *SnowBase* for this purpose remains as a key part of the daily discussions of the guiding team (including pilots), and that data is entered in all wildlife-related fields in *SnowBase*.

In each evening meeting, the area manager or assistant managers will ensure that one of the guiding team records all wildlife observations for that day in *SnowBase*. These observations should:

- be **consistent** ... record them on daily basis ; make entries even if they are of animals seen regularly, and when no animals are observed;
- be **accurate** ... where are the animals (using UTM coordinates), what are they doing when observed, and how did they react to our flying and/or skiing?
- clearly record **actions taken to avoid** known wildlife habitats that are commonly occupied by animals;
- accurately record what **operational decisions** we made and actions we took as a result of animal sightings ... what operational changes did we make as a result?

C.) USING WILDLIFE OBSERVATIONS TO MAKE OPERATIONAL DECISIONS

From a wildlife perspective, SnowBase has been set up as a decision-making tool; it allows for the use of “flags” on the daily run list (on individual ski runs or groups of ski runs) to highlight specific areas of concern, and to track our operational decisions in those areas.

The three wildlife “flags” have been developed in order of priority with respect to the needs and presence of the key wildlife species listed above. The “flags” include:

- **CAUTION** – these are short-term flags that are placed on runs (or groups of runs) where key wildlife have been seen, or are likely to be seen. The flags can be set prior to the season or at any point during the season. **Guides should not take groups to these runs until a field check has been done to verify that animals are no longer there.** These flags will automatically be cleared if / when a status check for wildlife shows (through lack of sign of animals or recent tracks) that animals no longer appear to be in the immediate vicinity (i.e. they should be greater than 500 m away from the run(s)). The runs can be used as soon as a field check verifies that animal are no longer present, but the results of the status check should be clearly described in SnowBase during the evening meeting.
- **ALERT** - these flags are placed on runs (or groups of runs) where wildlife have been seen persistently, or where they are likely to be seen over longer periods of time. For example, these might be used on mountain goat habitats that are commonly occupied during the winter. The flags can be set prior to the season or at any point during the season. **Guides should not take groups to these runs until a check has been done to verify (through lack of sign of animals or recent tracks) that animals are no longer in the immediate vicinity.** The flag remains until the manager or assistant manager manually clears the flag only after discussion with, and consensus among the guiding team, and only after entering written reasons for clearing the flag. Typically, Alert Flags will not be cleared unless sign of animals or tracks has not been detected for a period of about two days. The flag will be immediately restored if animals or tracks are again detected.
- **CLOSED** - these flags are placed on runs (or groups of runs) where specific needs of animals preclude our use. For example, these will be used for known wolverine dens (mid-late winter) or grizzly bear dens (early spring). **Guides should not take groups to these runs.** The flags can be set prior the season or at any point during the season. The flag can be removed from the runs (or groups of runs) only by the area manager, and only after he/she has discussed the specific location with the Director of Land Resources to confirm that the wildlife issues for that location no longer apply. The reasons behind this decision should be clearly noted in SnowBase.

D.) THE ROLE OF THE GUIDES AND PILOTS

One of the key foundations for our approach to wildlife is the process of verifying that wildlife are not present on, or adjacent to ski runs or flight paths prior to their use.

Much of this verification can occur as a result of regular operating practices ... guides and pilots should check specific runs or groups of runs when they do over-flights on their way to other skiing or when flying for other purposes (fuel, lunches, snow safety work, etc).

It is suggested that all guides and pilots play a part in this verification process. However, the snow safety guide may play a particularly important role. In those areas/runs where **CAUTION**, **ALERT** and **CLOSED** flags are set and where skiing might occur in the near future, a guide or pilot should visit these areas no more than 48 hours prior to the time when that use is probable. These visits should normally occur as high-level reconnaissance flights, and the “flags” should remain set if any evidence (tracks or animals) of the continued presence of wildlife is observed.

If it appears that the animals are no longer in the area, the pilot or guide should verify that assumption through a closer reconnaissance. This might include lower-elevation flights or verifying – on the ground - that tracks or animal are not present, or that any tracks that are present are older than about 24 – 48 hours (through signs of wind action, melting, new snowfall, faceting and formation of surface hoar, etc.). The guide’s and/or pilot’s observations should then become a key part of the wildlife discussion in the evening meeting that day, and in subsequent meetings about those locations. In all cases, this information should be clearly recorded in SnowBase.

E.) FLIGHT PATHS AND FLIGHT PRACTICES

Except where client or staff safety is an issue, guides and pilots will choose helicopter flight paths to maintain at least 500 m. horizontal or vertical separation from areas of occupied habitats and – where operationally possible – those habitats where animals (such as mountain goats, mountain caribou, moose, etc) are regularly seen by pilots or guides. This separation distance should be increased if the animals occupying these habitats show any evidence of being disturbed (via “flight or fright” behaviours) by our presence.

Guides and pilots will make all possible efforts to use regular and predictable flight paths (as per the mapped flight plans on the management plan maps as approved by government) to minimize disruption to animals and maximize the predictability of our presence.

Except where staff or client safety is an issue, flight practices (speed, elevation, rate of ascent/descent, rate of turn, etc.) will be used in the vicinity of habitats commonly used by key wildlife species that minimize potential noise impacts on wildlife and maximize the ability of animals to predict our presence and intent.

In all cases, mother-and-young groups will be completely avoided, particularly in early spring.

In particular, guides and pilots will choose flight paths with commonly occupied habitats in mind to avoid situations where helicopters might “surprise” animals (such as mountain goats or caribou) by suddenly flying around corners or over ridges.

We will not use helicopters to “flight-see” any wildlife species such as mountain goats, caribou or wolverine.

F.) HELICOPTER LANDINGS/PICK-UPS

Except where client or staff safety is an issue, guides and pilots will choose the trajectories of helicopter approaches, landings, pick-ups and take-offs to maintain at least 500 m horizontal or vertical separation from flagged runs. This separation distance should be increased if animals are observed to be occupying those habitats, and – particularly - if animals occupying these habitats show any evidence of being disturbed (via “flight or fright” behaviours) by our presence.

In all cases, avoid mother-and-young groups, particularly in the early spring.

G.) SKIING

If a guide observes animals on, or in the immediate vicinity of a ski run once he/she is on the run with guests, it is important to do all necessary (within the bounds of safety) to ensure that the presence of the group does not disturb the animal(s). This will include any or all of the following:

- ✓ Choosing a line and/or pick-up that will take the group away from where the animal(s) is located
- ✓ Holding the group until the animal(s) has continued its intended path
- ✓ Immediately contacting following groups by radio to ensure that they use other lines or runs to avoid further disturbance to the animal(s)
- ✓ Ensuring that the run is appropriately flagged during the evening meeting.

It is recommended that guides use these situations as an opportunity to educate our guests about what it is we're doing to avoid wildlife.

H.) USE OF ADAPTIVE MANAGEMENT

It is the intent of these procedures to ensure that we meet the goal outlined above. On a daily basis, it is the responsibility of the area manager and assistant manager – with the assistance of other company staff – to make decisions that show that we are adapting our operations to ensure that this goal is met. The ideal scenario is that we are able to continue to offer safe, quality skiing experiences to our guests in such a way that our presence does not result in any changes to animal behaviour or their use of preferred habitats.

At the end of the season, or at any point during the season, area managers should identify and be prepared to discuss:

- ✓ any specific locations where it is felt that animals “see” our existing activities as a neutral influence
- ✓ any specific locations that pose specific operational problems with respect to wildlife
- ✓ any areas/topics where additional training or information would help guides and pilots to achieve our goal.

These operating procedures will continue to be refined and improved as we learn more about our interactions with wildlife. This will happen through sharing information with each other in meetings and training sessions, by incorporating expert advice, and through incorporating the results of relevant research,