



Helicopter Use over Alberta's Wilderness

The use of helicopters for commercial and recreational purposes is often incompatible with the requirements and behavior of wildlife, and low-impact recreational opportunities. Not all of Alberta's wild spaces, wilderness areas, and conserved landscapes are officially protected, but are in effect *de facto* wilderness, and are increasingly precious in the face of the pressures of development. These lands are often the last strongholds of biodiversity and refuges to quietly recreate and seek solitude.

Alberta Wilderness Association (AWA) is opposed to the unrestricted use of helicopters over wilderness landscapes. Helicopter access to these lands must only be allowed for essential official or safety reasons where it does not adversely affect wildlife, fragile terrain and the human enjoyment of nature by non-motorized means. There should be no commercial or non-essential helicopter activity over legally protected wilderness or over lands zoned as Prime Protection, Critical Wildlife, and environmentally significant areas (ESAs).

AWA supports management tools and methods to diminish or eliminate the impacts of helicopter use on Alberta's wilderness.

Points of Emphasis

Much of Alberta's sensitive wilderness lies outside formally designated protected areas, but has been identified as Prime Protection Zone (Zone 1), Critical Habitat Zone (Zone 2), and other environmentally significant areas (ESAs). The use of helicopters in and over these lands, and over formally designated protected areas must be regulated and restricted except for essential official or safety purposes.

Authority, funds and capacity to enforce regulations and restrictions on all public lands must be made available to the enforcement agencies responsible for air traffic, protected areas and land-use decision making.

Any helicopter activity near wilderness lands including Prime Protection, Critical Wildlife zones, and ESAs must be restricted to flight paths that parallel main transportation corridors (roads and railways) already in existence. Specific restrictions on helicopter use must be developed to mitigate impacts on wildlife, including but not limited to:

- Moratoria on flights over or near wilderness used by wildlife during particularly stressful times, such as mating or calving seasons;
- Delineation of flight paths which do not cross wildlife migration corridors;

Exceptions may be required for essential official or safety purposes, but these flights must still adhere to strict rules regarding carrying capacity for number of flights that can be tolerated over any one wilderness area per day and per week;

Helicopters produce a significant amount of noise pollution. Long-term exposure to noise can cause excessive stimulation of the nervous system and chronic stress that is harmful to the health of wildlife species and their reproductive fitness (Fletcher, 1980; Fletcher, 1990). Adverse effects are known to include:

- Masking: The inability to hear important environmental cues and animal signals;



Non-auditory physiological effects including anxiety, increased heart rate and respiration, and general stress reaction; and

Behavioral effects may vary greatly between species and depending on noise characteristics, but often result in the abandonment of territory and diminished reproduction. (Cornman, 1994; Sierra Club, 2001).

Other forms of recreational air travel including fixed-wing aircraft and micro-light aircraft can also have an adverse effect on wilderness use and wildlife behavior and must be subject to similar regulations.

Solitude and freedom from the noise are essential values of a wilderness experience. These experiences are significantly diminished when motorized means are used to access wilderness. Conflicts arise when motorized and non-motorized recreational users access the same areas because the noise created by motors is incompatible with the peace and tranquility sought by low-impact users (Kariel, 1980, 1990).

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