

White out in the Alps

CAA position paper on artificial snowmaking and impacts on nature and landscape.

Preface

The ongoing development and mechanization of skiing areas in the Alps leads to a growing consumption of resources and increasing impact on nature and landscape. This evolution is one of the major aspects of deformation of the mountains in general. The extension of artificial snowmaking plays a major role in this process. The area of ski slopes in the Alps prepared for snowmaking has increased constantly in the last decades. By now, it covers about half of the 100.000 hectares¹ of slopes in the Alps. There is no end to this trend in sight. Especially in times of climate change, due to economic considerations the skiing areas are pursuing the goal to become more and more independent from weather conditions. However, technical snowmaking increasingly reaches its climatic and economic limits.

Impacts of artificial snowmaking on environment

Technical snowmaking in skiing areas has various impacts on nature and landscape:

- Snowmaking requires vast amounts of energy and water. This water demand can significantly alter the hydrology of a catchment and competes with other forms of water use (e.g. hydroelectric power production, drinking water). Wide-ranging water collection and evaporation from reservoirs cause the loss of water and especially lead to changes in the runoff regime of a catchment. The amount of water used for snowmaking in the Alps can lead to a severe encroachment especially in alpine regions affected by drought during wintertime.
- The construction of reservoirs, the levelling of slopes as well as water pipelines and snow canons are additional impacts on alpine ecosystems and landscape – with negative effects on its touristic attractiveness, especially outside of skiing season.
- Slopes being prepared with artificial snow remain snow-covered for a longer period in spring. This can result in a reduction of the growing season and subsequently in a change of vegetation and environmental conditions for plants (e.g. reduction of biological activity, lack of oxygen). Artificial snowmaking, especially when additives are used, can result in strong nutrient input into the soil.
- The immense efforts for snowmaking lead to increasing costs for the operation of

¹ Sylvia Hamberger, Axel Döring: "Der gekaufte Winter – Eine Bilanz der künstlichen Beschneung in den Alpen", 2015

skiing areas. Especially small areas reach their economic boundaries trying to remain competitive and every investment in the development of the skiing area increases their economic dependence on alpine skiing. Public funds often support the construction of snowmaking facilities. This results in a decrease of available financial resources for alternative touristic concepts.

CAA Position

Based on the Alpine Convention the CAA stresses the need to respect ecological, hydrological and climatic conditions in any new development of artificial snowmaking equipment. The CAA generally recognizes the goal of skiing areas to improve the reliability of their snow cover. At the same time, the CAA considers that unlimited development of artificial snowmaking is unrealistic and not sustainable, considering climate change in the Alps, the high expenses, and the severe impact on nature, water resources and landscape.

This is why the expansion of artificial snowmaking should be limited and then again, the negative impact of artificial snowmaking on nature and landscape has to be minimized. To achieve that the CAA demands the following:

- Only authorize the constructions of snowmaking equipment in skiing areas after an impact assessment², and in compliance with strict obligations as for ecology, water regime and landscape protection. Considerations must not be one-sided in favor of economic interests. In dry periods, the operating companies have to be obliged to stop snowmaking. The drinking water supply in a catchment always has to be given top priority.
- In times of climate change, new permissions for snowmaking facilities generally have to be limited to areas with a long-term perspective referring to altitude, exposition and local climate. The further development of snowmaking on glaciers has to be stopped.
- Approval processes have to include obligations for the removal of snowmaking equipment no longer in operation.
- Prohibit the use of biological or chemical additives in snowmaking.
- No public subsidies for artificial snowmaking. Instead, the financial resources should be used to foster concepts for diversified and sustainable tourism. Especially in low-lying skiing areas, the effects of global warming lead to the necessity of environmentally sound alternatives to skiing tourism.

Approved by the CAA General Assembly on September, 17th, 2016 in Innsbruck

² According to the EU directive on impact assessment



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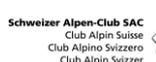
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