RECOMMENDATIONS FOR THE ALPINE PROTECTED AREA SYSTEM

To Strengthen the Protection of Biodiversity and to Promote Ecological Connectivity in the Alpine Arc

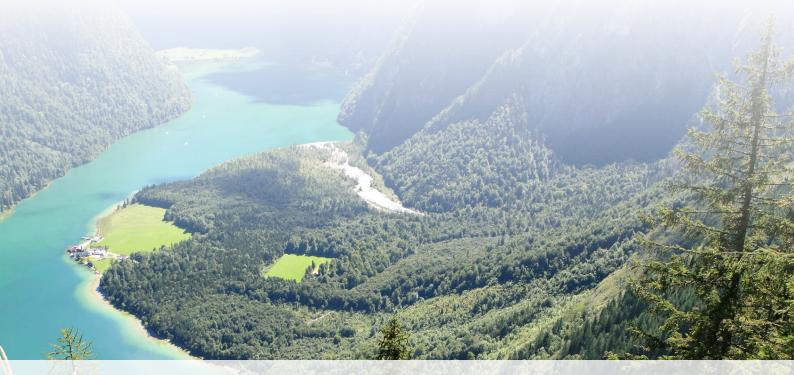


These recommendations target the importance of mountain ecosystems for the conservation of global biodiversity goals and can be considered therefore as a contribution from the Alpine Convention to meet the post-2020 strategic goals until 2050 and action targets until 2030.

ALPARC, the Alpine Network of Protected Areas is recommending the following principles to better protect Alpine biodiversity and promote ecological connectivity in the frame of global change within the Alpine Convention:

- 1. Recognize and **act** on established **policy guidance** from the Alpine Countries and the European Union supplemented by national biodiversity and green infrastructure strategies to better protect biodiversity and to foster implementation of biodiversity and ecological connectivity measures in the frame of climate change.
- 2. Make use of **existing instruments such as monitoring and planning tools** to better target action for concrete measures on the ground.
- 3. Ensure ecological corridors and **landscape permeability** for the inner-Alpine area.
- 4. Strengthen **local biotope networks** within and at the periphery of the Alps.
- 5. Safeguard natural areas **beyond protected areas** both within and outside of the inner-Alpine area, identify and secure green crossing spots (**stepping-stones**) between natural spaces.
- 6. Altitude matters Identify hot spots of biodiversity and insure nature protection at **all altitudinal levels**.

- Surface and the level of protection matters Ensure the development of large protected areas by increasing the surface wherever possible and by providing an adequate protection level.
- 8. Networks matters Ensure ecological connectivity of areas with high biodiversity by adapted measures.
- **9. Management** matters insure coordinated management and common goals of Alpine Protected Areas.
- 10. Direct and concentrate **touristic impact** in ways that limit access to fragile sites and preserve the last "**wild**" areas.
- 11. Expand **research** regarding the interaction between biodiversity, ecological connectivity and global change by large permanent monitoring sites.
- 12. Focus on **concrete strategic conservation measures** based on the COP Biodiversity decision of Montreal 2022 within the Alpine Convention area performing results within a recognizable time frame.



Recognize and act on established policy guidance from the Alpine Countries and the European Union supplemented by national biodiversity and green infrastructure strategies to better protect biodiversity and to foster implementation of biodiversity and ecological connectivity measures in the frame of climate change

Key-intention:

Define a common framework of policy guidance for biodiversity protection within the Alpine countries and linked to the EU Biodiversity Strategy for 2030 based on already existing agreements and strategies such as NATURA 2000, Alpine Protected Areas networks, national strategies and plans for nature protection. Refer to the respective content on Ecosystems and Biodiversity of the Climate Action Plan of the Alpine Convention.

A wide range of policy instruments (conventions, directives, strategies and policies) exists globally and in the European Union and the Alpine countries that directly or indirectly makes provision for biodiversity conservation and for the associated goal of maintaining ecological connectivity and preserving ecosystem services. Specific to the Alpine region is Article 12 of the Alpine Convention's Nature Protection Protocol, which requires an Alps-wide network of connected protected areas. More recently, provisions for ecological connectivity have also been included in the EU macro-regional strategy for the Alpine Region (EUSALP), which adopted a joint ministerial declaration on Alpine green infrastructure in October 2017. The Climate Action Plan 2.0 adopted by end of 2020 provides a frame for concrete action.

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Make use of existing instruments such as monitoring and planning tools to better target action for concrete measures on the ground

Key-intention:

Base action on existing technical, political and communication tools supporting the decision making to better target efforts and actions for biodiversity protection and ecological connectivity in the perimeter of the Alpine Convention and on local levels. These tools have been developed by Alpine experts and are especially tailored to the situations encountered in the Alpine area.

Over the last 20 years, a series of strategic and practical tools have been developed for the Alpine context aiming at supporting political and technical decision makers when elaborating actions to conserve biodiversity, restore or create ecological connectivity, elaborating mitigation or adaptation measures in the frame of the global change. These tools address political recommendations, communication support, strategic orientation but also include concrete planning tactics (e.g. the SACA approach elaborated by ALPBIONET2030, the JECAMI tool or further plans and tools elaborated by diverse working groups of the Alpine Convention).

Ensure ecological corridors and landscape permeability for the inner-Alpine area

Key-intention:

Reduce ecological fragmentation within the Alps, keep spaces open and allow species migration with the goal to strengthen biodiversity conservation and as adaptation strategy on climate change.

Ecological corridors are highly significant for species migration and constitute an important greeninfrastructure and adaptation strategy in the face of climate change. To insure biodiversity protection in a long term perspective it is even more crucial to guarantee a high degree of landscape permeability and to avoid constructions in the last non-fragmented sectors of the Alps bridging numerous key biodiversity areas (KBA) and to promote a diversified and whenever possible organic agriculture.

Some of the Alpine ecological macro corridors have a very high significance not only for the Alps and the EUSALP area but also for larger parts of Europe by connecting European mountain massifs and different biogeographical regions as well as different cultural landscapes.

Actions for ecological connectivity conservation, restoration or creation should focus on these key biodiversity areas, which are of critical importance to the Alps, to ensure landscape permeability.

Protected areas are the backbone of the ecological macro corridors. They must be supported in their leadership efforts to act beyond, their mostly hard-defined borders, to allow for permeable linkages between protected areas thereby creating ecological macro corridors in the landscape integrating ecological processes through the integration of flood plains, diversified forests, bocage landscapes and wilderness

Strengthen local biotope networks within and at the periphery of the Alps

Key-intention:

The combination of various smaller ecological networks can – if carefully planned and integrated into a larger landscape vision – form a coherent large-scale network of wellfunctioning and interconnected habitats.

The framework conditions for conserving, restoring or building new ecological networks at the local level with regard to environmental and spatial planning policy, funding possibilities, governance solutions, capacity of different stakeholders, etc. differ widely from country to country and even from region to region in the Alpine and EUSALP context.

Nevertheless, these local initiatives should have a model function and are crucial to genuine improvement of ecological connectivity in the field and the support of landscape permeability. However, to avoid the development of numerous individual projects that may certainly have a positive impact locally but overlook potential overlap or synergy with neighbouring efforts, a larger scale planning framework and a corresponding landscape vision is necessary.

For this reason, it is important to create and support implementation mechanisms on the regional level and commitment by mountain countries to strengthen actions towards the protection of mountain biodiversity as well as the livelihoods of local communities.

The transition area between the Alps and their periphery represents a challenge as the intensive land uses tend to isolate the Alpine areas from the flatter surroundings. The cooperation with EUSALP is crucial in this context. Safeguard natural areas beyond protected areas both within and outside of the inner-Alpine area, identify and secure green crossing spots (stepping-stones) between natural spaces

Key-intention:

To safeguard natural areas beyond protected areas, it is necessary to identify and secure green crossing spots (stepping-stones) between the EUSALP and the Alps through international coordination by the Alpine Convention.

The Alps are surrounded by an important infrastructure and activity belt isolating Alpine nature and species. This belt is characterized by an important concentration of urban and economic infrastructure generating high transport end energy flows.

To overcome this belt and to ensure connectivity from and to the Alps, two things are needed: connectivity from the inner Alps towards the outer Alpine periphery and permeable landscape elements through the intensively used Alpine periphery. As much as protected areas and steppingstones through diverse biotopes and still intact natural sites may help within the Alps, a clear definition and legally binding establishment of so called "green crossing spots" within the Alpine periphery is necessary to preserve the last potential ecological links between the Alps and their periphery in some parts of the EUSALP perimeter.

As a legally binding instrument is needed, the coordination should be proposed by the Alpine convention as an international treaty which, in article 12 of the Nature Protection Protocol, envisions the establishment of a national and transboundary network of protected areas, biotopes and other protected or entities "worth protecting".

Especially the cooperation of the Alpine, the Carpathian Conventions and the Convention of Biodiversity are showing positive effects of these institutionalizing efforts for mountain regions and could provide an input at a global scale for other mountain regions.

Altitude matters – Identify hot spots of biodiversity and insure nature protection at all altitudinal levels

Key-intention:

Alpine biodiversity is concerned by intensive land use at all altitudinal levels, even if in different degrees. The vulnerability of ecosystems, their threats as well as their importance for global biodiversity and especially mountain biodiversity must be considered in the context of anthropogenic use of land. Hotspots of biodiversity need to be protected at all altitude.

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The transition area between the Alps and their periphery represents a challenge as the intensive land uses tend to isolate the Alpine areas from the flatter surroundings. The cooperation with EUSALP is crucial in this context. Surface and the level of protection matters – Ensure the development of large protected areas by increasing the surface wherever possible and by providing an adequate protection level

Key-intention:

Alpine Protected Areas as backbone of biodiversity protection are generally too small and often not protected enough for the long-term conservation of numerous species. Solutions need to be found. One pragmatic solution is the extension of existing protected areas by an adapted zoning.

The size of protected areas plays an important role in the protection of habitats, ecosystems, ecological processes, and thus biodiversity. It can be generally stated that the larger the areas, the higher the number of species and individuals and of natural processes taking place. The smaller the areas, the bigger the risk that negative external influences, including insular phenomena that undermine genetic exchange, are more likely to have an impact. In the long run, species protection will be undermined by too small, unconnected protected areas for many animal and plant species (Broggi, Staub, & Ruffini, 1999).

In the Alp's, generally, protected areas are too small and often having a too weak protection status. Considering the difficulty of the creation of new protected areas, one solution exists in the extension of already established protected areas and by providing them with an adequate zoning of different protection levels according to the needs of habitat and species conservation in the various sectors of the concerned territory (buffer zones with an adequate, situation adapted protection level). Networks matters – Ensure ecological connectivity of areas on a regional level with high biodiversity by adapted measures

Key-intention:

Alpine Protected Areas are too small to insure by themselves the needed gene exchange of species by providing adequate territories. A permeable landscape structure with ecological corridors and linked habitats building larger areas of non-fragmented habitats is crucial for the survival of the Alpine biodiversity.

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Management matters – insure coordinated management and common goals of Alpine Protected areas

Key-intention:

Protected areas need to be managed and goals to be coordinated between protected areas, especially in the case of transboundary protected areas. Only a low percentage of protected areas dispose of management staff. Biodiversity conservation goals need to be more harmonised and actions coordinated.

Protected areas with an adapted management system contribute on various levels to biodiversity conservation goals – by concrete measures on their territory, by active and adapted interventions or nonintervention, by controlling of the frequentation and the sensibilisation of the large public within sensitive sectors of the protected area. As well by an active monitoring and research activity allowing to optimise conservation strategies. Protected areas are official institutions of the Alpine States and they are unique in the Alpine landscape. To support them with staff and means is a public task. Their cooperation is based on an initiative of one of the Alpine Convention contracting parties.

To achieve the best conservation results, a continued definition of common goals of protected areas and a coordinated management between them to apply conservation measures in the most efficient way for a common protection of Alpine biodiversity for generations to come is needed. A well-functioning platform of exchange in form of an alps-wide network of protected area manager is helpful and exists with ALPARC. 10

Direct and concentrate touristic impact in ways that limit access to fragile sites and preserve the last "wild" areas

Key-intention:

"Tourists tend to destroy the locations they are looking for" – this well-known and provocative statement may become true for the last wild and untouched areas in the Alps if limits are not imposed. Education, awareness raising and restrictions, if needed, are the instruments to achieve this goal.

On one hand, tourists are essential for the Alpine economy particularly in remote or rural areas where other sources of income are difficult to establish. On the other hand, they are dangerous for fragile natural areas. The trend towards spending leisure time out in the wild is widespread and increasing. Refuges for wildlife in protected areas or outside are under increasing pressure from the increasing number of hikers, bikers and ski touring visitors. This particularly refers to those who disregard restricted areas as they seek an exceptional experience in nature or aim to take the ultimate picture for their social media account. Beyond the direct impact on nature by tourists, the need for space and territories to build infrastructure and access roads is another aspect. This infrastructure has a considerable impact on the surface and quality of natural areas, too.

Therefore, guiding of tourist flows, sustainable tourism offers including the issue of sustainable transport and education of tourists is urgently needed to preserve wild areas in and around the Alps. There must be zones of "non-construction" of infrastructure, as otherwise the technical feasibility of more and more spectacular installations will override every good reason to stop in areas where valuable nature still exists.

This issue is very much adapted for an international resolution or at least declaration as many mountain massifs are taking the Alps as a best practice for their own economic development. Expand applied research regarding the interaction between biodiversity, ecological connectivity, and global change by large permanent monitoring sites

Key-intention:

Alpine research and especially with the help of protected areas can provide knowledge and observation sites for long-term monitoring observing the effects of climate change on biodiversity including the issue of invasive species. A clear dedicated target could be formulated: "Ecosystems that are particularly vulnerable to climate change are subject to monitoring and adaptation measures in anticipation of the degradation they incur".

There is an urgent need for the development of a common multi-disciplinary management strategy between neighboring states and regional administrations concerning biodiversity protection in times of climate change.

This necessarily needs a holistic approach that bridges multiple levels of research and administration. Additionally, the process must be paired with coordinated long-term monitoring efforts, to ensure a shared knowledge base of species distributions, movements, changes in habitats and ecosystems and the effects of climate change on these topics and especially as well regarding invasive species becoming a major threat due to a new climate situation in a more and more globalised world. Linked to this aspect, surfaces liberated from glaciers should be dedicated to monitored areas with a protection status to follow further evolutions of such areas in terms of biodiversity and ecological processes. Actors responsible for wildlife management need to understand, and when appropriate, promote wildlife corridors and ecological connectivity in regional spatial planning processes to facilitate adaptive wildlife movements in a rapidly changing world. Wildlife movements need as well to be considered in the frame of climate changes and adaptation strategies to be elaborated. All this needs long term monitoring which could be provided by protected areas but not only.

For political decision and implementation of concrete measures a deep knowledge of ecological processes, legal and social-economical frame conditions are crucial to succeed. The network of the various protected areas with different legal status and in different ecological localisations of the Alps and their work with local, regional, and national researchers, planners, various stakeholders and decision makers are an excellent fundament for a long-term monitoring strategy. Another important argument is the availability of permanent staff in these areas. Focus on concrete strategic conservation measures based on the COP Biodiversity decision of Montreal 2022 within the Alpine Convention area performing results within a recognizable time frame

Key-intention:

Implement in the Alpine area concrete measures to demonstrate success in biodiversity preservation as a strong signal towards the implementation of the COP Biodiversity decision of Montreal and towards other regions and mountain ranges. The Alpine Convention with its binding character is an excellent framework for such a strategy.

The implementation of concrete measures for biodiversity protection within the Alpine Convention area and beyond national borders by fulfilling the 30% goal of the COP'22 decision is a concrete approach to present success factors of biodiversity protection. The protection of biodiversity in the Alps needs nevertheless strong protection. Well protected areas with a large surface, a high protection level representing all altitudes, relevant habitats and species are crucial to achieve this goal. For this reason, we recommend increasing for the Alpine space, already strongly impacted by human activities, the level of protection comparable to the IUCN categories I and II including the aspect of "wilderness" for all areas presenting a high potential of biodiversity and being suitable by their physical and geographical features.

The harmonisation of those protection measures between Alpine countries increases their success in a larger scale if further ecological parameters such as ecological process protection are fulfilled as well. The Alpine Convention provides a legal basis for such an approach and the Alpine countries should ideally also refer to the Alpine Conventions protocols in their national biodiversity strategies and responding to its binding character.

Providing the possibility to demonstrate the success of concrete and strategic conservation measures according to the goals of the COP decision within a concrete territory and a reasonable time frame may motivate for a larger involvement of local populations in such strategies considered as an essential factor of long-term success for the conservation of biodiversity and human health and survival. The Alpine Convention can be an ideal international tool for such a cooperation between national and regional governments and the Alpine population towards more biodiversity protection for generations to come.

