



# PROTECTED AREAS & BIODIVERSITY

## Background:

The Alps are among the richest regions in Europe for the variety of their landscapes and their plant and animal species. As the loss or destruction of habitats is the most direct threat to biodiversity, protected areas are crucial in countering the continuing loss of ecosystems and species. All in all, more than 1,000 large Alpine protected areas are listed, covering some 25% of the Alpine region. The Alps are thus one of the world's most important ecoregions in terms of con-serving global biodiversity.

Closely linked to biodiversity is the environmental microbial diversity that influences the human microbiome, i.e. the collection of microorganisms including bacteria, archaea and fungi living in and on the human body. This is an emerging research field in medical science and holds significant health tourism potential as an Alpine-specific resource.

## Medical evidence:

The best-researched aspect of the direct link between protected areas and human health concerns the effects on psychosocial well-being. Protected areas have a strong restorative capacity and have been shown to aid recovery from mental fatigue, reducing stress levels, assisting cognitive functioning and improving the overall psychological state. Some studies show that these psychological benefits are higher in areas of greater biodiversity. Furthermore, research indicates a potential beneficial and protective influence on respiratory systems of residential areas with high biodiversity.

No intervention study could be identified that explicitly links Alpine-specific protected areas to direct health outcomes. However, based on the indirect links of protected areas and biodiversity to human health and well-being, it strongly appears that there exists a huge potential for health tourism. Protected areas also play a key role in the conservation of other Alpine natural resources with medically and scientifically proven effects, such as waterfalls, and can therefore be seen as "meta health resources".

## Health tourism potential:

- A balance must be found between offers and access to unspoilt nature and diverse nature.
- Visitor guidance measures are required to conserve and protect biodiversity and nature.
- Include such indicators as "Nature connectedness / Nature relatedness", "Recovery from stress and fatigue", "Health related quality of life / Well-being" and "Promotion of physical activity" when developing and promoting tourism offers.

