

Beatenberg-Habkern Natural Forest Reserve in the Canton of Bern



An ibex surveys its surroundings. Picture: A. Bernasconi

The forest climate protection project in the region of Beatenberg-Habkern, Switzerland, supports the implementation and monitoring of a natural forest reserve. Thanks to the complete abandonment of the use of wood, the forest can develop undisturbed, absorb more CO₂ from the atmosphere and provide a quiet, undisturbed habitat for many animal and plant species. In addition, forests help to filter pollutants from the air and soil and thus contribute to more clean water.

Forests are priceless ecosystems. They are an essential component in the fight against climate change, as they capture the greenhouse gas carbon dioxide (CO₂) and generate oxygen at the same time. Forests also serve as recreation areas for people, provide habitats for many rare and endangered animals and plant species, act as a water store and produce wood – an important renewable building material.

While the focus in developing countries tends to be on protecting forests, industrialised nations are aiming to adapt the forestry industry in response to climate change and to promote biodiversity. This happens through adapted management, on the one hand, whereby the use of wood in the forest is reduced through specific silvicultural measures. On the other hand, it is also possible to establish a natural forest reserve where utilisation is abandoned completely. The project in the Beatenberg-Habkern region pursues the second approach.

Natural Forest Reserve Facilitates Carbon Storage

This climate protection project encompasses an area of around 592 hectares of forest in the Beatenberg-Habkern region. The forest is currently used for a variety of purposes, but the implementation of the project guarantees that use of the area for forestry will be abandoned. That means the amount of wood in the forest will build up and habitats for rare and endangered animal and plant species will be preserved or improved or can develop anew.

Project type:

Land Use and Forestry

Project location:

Switzerland

Project status:

In operation

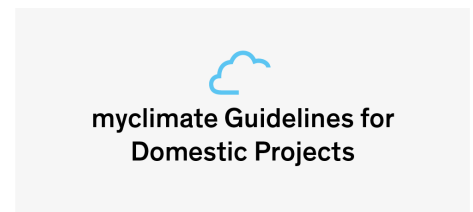
Annual CO₂ reduction:

3 407 t CO₂e

Situation without project

Less carbon accumulation in the forest, lower biodiversity

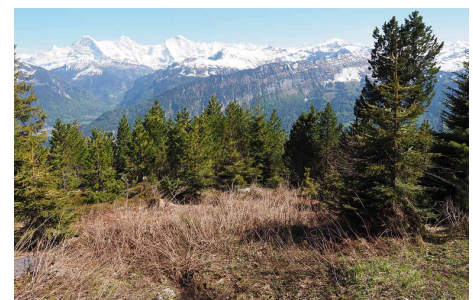
Project standard



Partner



Impressions



Gemmenalphorn: view towards the Bernese Alps. Picture: B. Zurbuchen

As a result of the current forest management and use of wood, the wood reserves amount to around 244 cubic metres per hectare, which means that the forest is unable to fully reach its potential as a carbon sink. In future, full abandonment of timber utilisation should help to create a forest with wood reserves of 488 cubic metres per hectare. That means the project will lead to a doubling of the wood reserves over the same area.

This carbon sink function – that is the storage of carbon in the forest's biomass (trunks and branches) and in the soil – is also described as a nature-based solution, meaning the use of a natural process as a solution to counter global warming. This carbon dioxide removal is an important process in reaching the negative emissions that are urgently needed to achieve the Paris climate goals.

Since the Confederation credits itself with part of the sink effect of Swiss forests to the national carbon footprint under the Kyoto Protocol, each CO₂ certificate of this project is additionally backed by a certificate of a forest project benefiting smallholder families in order to avoid any double counting by the state.

Forest Reserve Secures Habitat for Black Grouse and Three-toed Woodpecker

In addition to the positive impact on the climate, the project also has an influence on the biodiversity of the flora and fauna. The complete abandonment of utilisation means habitats are preserved and promoted, and the species have a safe heaven in which to grow and reproduce. The more densely overgrown forest sections and the deadwood left behind create important habitats that animals lack in managed forests.

The indicator species of this forest reserve are capercaillie, black grouse, hazel grouse and the three-toed woodpecker. An indicator species is an animal or plant species that is characteristic of a certain habitat and which reacts especially sensitively to changes in the environment because of its particular requirements. Where indicator species are found, there are also good conditions for numerous other species found within the same habitat. Consequently, protective measures like this forest reserve not only help the indicator species, but also entire communities of animal and plant species.

This project contributes to 2 SDGs (as of end 2021):

Find out how myclimate reports these SDGs in our FAQ.

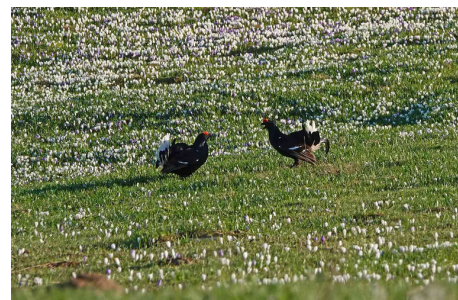
These SDGs have been approved by myclimate:



The increase in wood reserves should capture an average of up to 3 407 tonnes of CO₂ from the atmosphere annually. Over the 50-year total duration of the project, this equates to an emissions reduction of up to 170 345 tonnes of CO₂.



Hohgant/Furgegütsch in the November light.
Picture: B. Zurbuchen



Black grouse are one of the indicator species within the natural forest reserve. Picture: Fritz Bieri / beatenbergbilder.ch



Ptarmigan. Picture: Fritz Bieri / beatenbergbilder.ch



The adapted management helps to create habitats for countless animal and plant species.