

2018 Activity Report Hohe Tauern National Park

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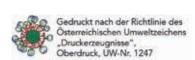
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Although every care has been taken, printing errors and mistakes cannot be ruled out. Version: February 2019



#### CALOPLACA ISIDIIGERA

Lichens are a group of organisms that is generally overlooked. However, these symbiotic beings of fungi and algae characterise the outward appearance of the vegetation in many biotopes, especially in the semi-natural areas of the Hohe Tauern National Park. In the scientific publications of the Hohe Tauern National Park, in the volume dedicated to lichens, 200 of the most important species are portrayed along with an introduction to the diversity of lichen shapes and life.

(Source: Flechten. Wissenschaftliche Schriften. 2016. Hohe Tauern National Park Council Secretariat. Sold in bookshops by: Tyrolia-Verlag)

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#### The 2018 national park year



1918 was and is a very important year for Austria. 100 years since the founding of the republic meant 2018 was dedicated to this historic event. 1918 was also an important year for the Hohe Tauern National Park.

The benefaction of an area measuring 4,072 ha including Grossglockner and the Pasterze glacier to the then German and Austrian Alpine Club by the Villach forest industrialist Albert Wirth was an important foundation for today's Hohe Tauern National Park.

In the meantime, stringently protected national park areas, where nature can evolve without interference, now account for an estimated three percent of Austrian territory. With the six Austrian national parks working closely together under the umbrella of Nationalparks Austria, we are protecting a priceless treasure, for which the federal government also has a special responsibility: From the steppe landscape in the very east over forest, river and meadow landscapes up to the high mountains and the eternal ice, nature conservation and wilderness come first here.

100 years later, the Hohe Tauern National Park is presenting itself in 2018 as something modern and new. With numerous innovations, from the re-launch of its online presence to its revamped corporate design, the national park is constantly evolving and fulfilling its pioneering role.

With this in mind, I would like to sincerely thank everyone who contributes to the conservation of these extraordinary natural gems. We will continue to work together for nature with all our strength and to preserve it together – as we owe this to our country and future

Warm regards ELISABETH KÖSTINGER

Federal Minister for Sustainability and Tourism

#### Unity despite diversity







Together, we, the three federal provinces of Carinthia, Salzburg and Tyrol, can look back on a successful year in 2018 with the Federal Ministry for Sustainability and Tourism. Not only because of our wide variety of biodiversity, but also in the diversity of laws and political structures are we proud to maintain, preserve and develop the cross-province Hohe Tauern National Park in a uniform and shared way as natural heritage with its natural and cultural landscapes.

At provincial level, it is crucial to strengthen the position of the national park together with the protagonists on site. As part of our collaboration with the National Park Council, the national and international objectives for a national park of IUCN category II are always observed. They provide the necessary guidance for us to live a global concept in the largest national park in Central Europe. But this life also requires adjustments and measures necessary for creating a great collaboration.

Without the constructive cooperation of all interest groups in and around the National Park conducting crucial work in our committees, steering groups, boards of trustees and advisory councils, it would not be possible to evolve the national park concept.

This report will guide you through an exciting year in the national park and show objectives, measures and achievements in our business areas of natural resource management, science & research and education & visitor information. Our activities try to convey our view and love of nature. This is because you protect what you love! One common goal in our national park is the conservation of the natural and cultural landscape as well as the promotion of regional development and tourism. Sustainable management is the weapon of our choice. This is how we preserve the legacy of our ancestors and pass it on mindfully to future generations.

A big thank you to all of our supporters and employees for their dedicated and passionate commitment, fantastic ideas and crucial decisions for our Hohe Tauern National Park.

We hope this report is entertaining to read and makes you want to explore the treasures of the Hohe Tauern more closely.







Bundesministerium Nachhaltigkeit und Tourismus

# Data & facts

#### Data & facts



With 1,856 square kilometres, the Hohe Tauern National Park is the largest national park in the Alps and one of the largest protected areas in Central Europe.

	Core zone (km²)	Outer zone (km²)	Special protected areas (km²)	Overall (km²)
Carinthia	291	113	36	440
Salzburg	440	266	99	805
Tyrol	347	264		611
NP total	1078	643	135	1856

_	East-West reach	100 km
_	North-South reach	40 km
_	Above sea level	1,000-3,798 m
_	Mountain peaks over 3,000 m	
	above sea level	> 300
_	Glaciation	155 km² / app.
_	Glaciers	342
_	Natural mountain streams/rivers	279
_	of which glacier streams	57
_	Significant waterfalls	26
_	Mountain lakes betw. 35 m <sup>2</sup> & 27 ha	551
_	Moors	766

#### The natural and cultural Alpine landscape

The preservation of all significant Alpine ecosystems across large areas of the Hohe Tauern National Park has been unimpaired. More than one third of all plant species recorded in Austria can be found in the national park. For mammals, birds, reptiles and amphibians, this figure is at around 50%. Even those animals that were nearly extinct in almost all of Europe at the beginning of the 19th century now have a safe habitat in the national park.

This impressive biodiversity is a result of the different prevailing climatic, geological, geomorphological and hydrological conditions in the high mountains and the different adaptation strategies of the plants and animals. If you walk from the valleys to the highest peaks in the national park, crossing the altitudinal belts will be akin to walking through all the climatic zones from Central Europe to the Arctic.

The Tauern Window – a unique tectonic window in terms of shape and size – provides insight into the deepest tectonic layer of the Alps and is thus key for understanding the geological structure of the Alps. Rocks of differing ages, different origins and different chemical composition harbour a genuine hoard of up to 200 different minerals.



#### Data & facts

In the landscape forms of the trough and hanging valleys, the cirques, glacial horns and tarns, the ravines and gorges etc. are an indication of the modelling power of the Ice Age glaciers as well as the constant work of weathering and erosion by gravity, frost and water. It is a harmonious transition from the natural Alpine ecosystems in the core zone of the national park into the cultural landscape of the outer zone. Here, Alpine farming dating back centuries has led to symbiotic communities whose diversity must be sustainably preserved.

#### Main tasks

It is not just the legal basis and objectives that are crucial for the development of a protected area. The establishment of a professional management organisation primarily realised by the national park authority is vital too.

#### **Business fields:**

Natural resource management, science and research, along with education and visitor information, are the central responsibilities of any national park across the globe, as specified by the IUCN. The preservation of the cultural landscape in the outer zone, as well as regional development and tourism, are additional key areas of national park management. Conscious of the fact that the Hohe Tauern National Park is not isolated in its existence but is embedded in the region in a busy national park region where people live, work and earn money, the national park authority makes a substantial contribution to regional development with its varied activities and programmes.

#### Sustainable development

The big challenge is to ensure sustainable conservation and, at the same time, a development that is compatible with the objectives of the national park, in line with the interests of the local population.

#### Zoning

The development objectives in the protected area are determined by the zoning and requirements of IUCN category II. The national park's core zone has the protection of nature as a whole as its priority. Here, any intervention in nature and the ecosystem, as well as any interference with the landscape, is prohibited with a few exceptions from an exhaustive list. The special protection area of "Sulzbach valleys' wilderness" (Salzburg) satisfies the criteria of IUCN category Ib.

The outer zone surrounds the core zone and represents the transition area from the permanent settlement area to the areas subject to stringent protection. Here, you will find the semi-natural cultural landscape typical for the Hohe Tauern, cultivated for centuries by man, with pastures, mountain meadows and larch-covered pastures. In the outer zone, technical developments such as the installation of power plants (except small power plants for the pastures) and ski lifts are prohibited.

## Natural resource management



science & research



Education & isitor information



Preserving the cultural landscape



Regional development & tourism



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# Overview

#### The 2018 national park year



#### 21 January, Mittersill 22<sup>nd</sup> meeting of the National Park Council

As of 1st January 2018, Salzburg assumed the chair of the National Park Council for two years. The political representatives of the National Park Council are convinced that the pooling of all forces, which Carinthia, Salzburg and Tyrol, as well as the Republic of Austria, can summon it the only way to be able to improve and develop the largest nature reserve in Central Europe and the Alps. The intensive collaboration of all stakeholders is the order of the day.



#### 25 - 28 January, Berchtesgaden 23rd "Ranger Olympics" Danilo Re

The "Danilo Re Memorial" is a sports competition for national park rangers in the Alps. The "Ranger Olympics" took place on the last weekend in January and the General Meeting of the Alpine Network of Protected Areas (ALPARC) in Berchtesgaden National Park. Four teams from the Hohe Tauern National Park took part. The Tyrol women's team took first place in the women's competition. The mixed team from Salzburg bagged an excellent second place in the overall standings.



#### 11 April, Nussdorf-Debant

#### National park and tourism association East Tyrol – Kick-off event

Together with the Hohe Tauern National Park, the East Tyrol tourism association has set the goal of improving the exploitation of the largest national park in Central Europe as a tourist destination for East Tyrol. Shared goals and concrete projects have been devised for four areas of action (water adventure, experiencing the national park, e-mobility and networking). A kick-off event took place on 11 April, where original content and results from the action area "Experiencing the national park" were presented.



#### 22 April, Mallnitz

#### Re-opening of the Mallnitz visitor centre

On 22 April, the rebuilt Mallnitz visitor centre was reopened with a new exhibition "univerzoom nationalpark" and the entirely new research workshops, the "rangerlabs". Numerous guests of honour did not pass up on the season opening. Governor Peter Kaiser, National Park Officer and Member of Provincial Government Sara Schaar and Member of Provincial Government Martin Gruber opened the new exhibitions. An attractive offering on the theme of "Learning from nature" was created for various target groups.



#### 4 – 7 June, Mittersill HBLA Urprung project week

HBLA Ursprung visited the Hohe Tauern National Park for the third time. The third year of the "Environmental and Resource Management" course was invited to gain an insight into the management of the national park for the fields of cultural landscape, wildlife management, geology and weather and climate. This project aims to provide young people with the broadest possible insight into specific activities at the national park and to explain its significance for sustainable development in the region.



#### 6 - 7 June, City of Salzburg The national park comes to town

In June, the national park invited the pupils of the city of Salzburg and surrounding areas to the grounds of the Hellbrunn Palace grounds. Collaborating with the palace and park management teams at Hellbrunn, it was possible to ensure that an exciting morning with an estimated 900 children and 100 teachers ran smoothly. This event aims to increase awareness in pupils from the City of Salzburg and surrounding municipalities about the diversity of the national park.



#### 8 June, Mallnitz

#### Bearded vultures Caeli and Kasimir released

The two young bearded vultures Caeli and Kasimir were released into the wild in Seebachtal near Mallnitz. The young vultures originated from Haringsee/Lower Austria and Andalusia. This release is a significant component of the international reintroduction project of the bearded vultures to the Alps, in which the Hohe Tauern National Park has been actively involved since its beginning. This is currently the last planned release of young bearded vultures in the national park for the time being. While Kasimir remains more loyal to the location, Caeli has been undertaking long excursions to Lower Engadin.

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#### 18 June, Matrei

#### New partner school: NMS St. Jakob im Defereggental

LH-Stv.<sup>in</sup> Ingrid Felipe welcomed NMS St. Jakob to the network of partner schools in the protected area. Felipe saw considerable benefit for the future, even in terms of education about sustainable development in the interdisciplinary nature outreach programme conducted by national park rangers together with teaching staff. Children can be multipliers by sharing their knowledge outside of school and, above all, being well prepared for later life in terms of relationships between nature and the environment.



#### 18 June, Matrei

## 2018 summer exhibition – spotlight on old breeds of livestock breeds

"Of blue goats and black pigs" – this was the title used to open the exhibition at the National Park House in Matrei at the start of the summer season. The exhibition curated by Salzburg landscape ecologist Günter Jaritz about endangered breeds of domestic animals in the Alps not only caught the attention of visitors but that of many locals too. Who has still heard of the Pinzgau domestic goat or the Sulmtal chicken? The exhibition presented old breeds from the Maritime Alps to Switzerland and Slovenia.



#### 27 – 28 June, Niedernsill

#### Climate school festival with 1,700 pupils

The fact that learning and having fun in environmental education are not mutually exclusive was once again demonstrated by the large partner school festival in Niedernsill in June, in which this year's cross-province climate school festival was integrated. With considerable support from the municipality of Niedernsill, it was once again possible for the team of the national park administrations from Carinthia, Salzburg and Tyrol to transform the recreational area around the bathing lake into an enormous "classroom" with exciting knowledge, movement and experience stations.



#### 5 July, Muhr im Lungau

#### Opening of the exhibition: (M)ursprung

The new exhibition "(M)ursprung – the flow of nature" was officially opened in the national park municipality of Muhr im Lungau. The exhibition has daringly established a bridge between two worlds – from the untouched core zone of the national park to the development zone of the UNESCO Salzburger Lungau Biosphere Reserve.



#### 16 July, Mallnitz

#### 15 junior rangers commence training

In July, 15 young people started their two-week long training programme to become Kärntnermilch Junior Rangers in the Hohe Tauern National Park. This year, 15 boys and girls aged between 13 and 15 were trained to become junior rangers in the Hohe Tauern National Park, Carinthia, who can then help the "real" national park rangers in the coming years.



#### 10 – 12 August, Neukirchen 12<sup>th</sup> Day of Biodiversity

"More than 30 participants working in the field of science from the most diverse botanical and zoological disciplines faced a special challenge in 2018," noted Member of Provincial Government, Maria Hutter. The study sites were located in the Sulzbach valleys' wilderness area created in September 2017, in the municipality of Neukirchen am Grossvenediger. In order to explore untouched land, long ascents on partially unpaved roads had to be undertaken, but this meant that it was possible to record intact ecosystems.



#### 6 September, St. Jakob

## Provincial Government of Tyrol a guest of the national park

As part of the meeting of the Provincial Government of Tyrol, the Hohe Tauern National Park was visited along with the House of Water in St. Jakob. The hike to the Trojeralm valley in St. Jakob in Defereggen in September marked the beginning of the provincial government retreat. The government retreat also ensured critical further steps in the development of the House of Water were decided by passing a corresponding resolution.



#### 8 – 9 September, Vienna

#### Harvest festival in Vienna's Augarten

In the Nationalparks Austria village, visitors will be greeted by the scenic diversity that the national park has to offer. Steppes, pristine primaeval and floodplain forests, gentle valley landscapes, river valleys, rugged limestone mountains and the eternal ice of the glaciers. Hiking and excursion destinations, accommodation and guided tours were presented – everything relating to the local natural heritage! Federal Minister Elisabeth Köstinger also paid a visit to the Nationalparks Austria site.



#### 8 September, Neukirchen

## Open day at the mine – "Inside life" special exhibition

This summer, visitors to the national park were able to preview the exhibition of work by the Salzburg artist Michael A. Seywald in the Hochfeld mining museum in Neukirchen. His paintings symbolise the inside life of the Hohe Tauern region. This remarkable exhibition ran from July until the end of October in the mining museum. On 8 September, it was possible to visit the exhibition free of charge as part of an open day at the mine.



#### 22 September, St. Jakob 15 years of the House of Water

The Tyrol environmental education centre and the meeting point for researching youth is the House of Water visited by over 22,000 people since its opening. The 15th anniversary of the house was celebrated in September with a well-attended open day. The redesigned large panels about the international Swarovski Waterschool in the outdoor area on the path between the two hotels Lärchenhof and Zirbenhof garnered much attention. The House of Water was also visited by the Provincial Government of Tyrol to mark its anniversary.



#### 5 November, Villach

## 100<sup>th</sup> anniversary Commemorating a pioneer of the national park

One hundred years ago, the Aicher von Aichenegg sisters sold the entire Pasterze glacier, the most beautiful and longest glacier in the Eastern Alps and its surrounding steep flanks including Austria's highest peak, the Grossglockner to the Österreichischer Alpenverein. The forest industrialist Albert donated the money for the purchase, thus laying the foundation for the establishment of a national park. To honour him and his work, the Hohe Tauern National Park and the Österreichischer Alpenverein hosted a symposium and ceremony in Villach at the start of November.



#### 5 November, Heiligenblut

#### Launch of the "Ibex House"

Project partners for the "Welcome Centre – Ibex House" are the municipality of Heiligenblut am Grossglockner, the Heiligenblut tourist board, the Carinthian National Park Fund and the association of the Friends of the Hohe Tauern National Park.

The exhibition is dedicated to the subject of ibex. The aim is to provide visitors with a modern information and service facility with national park shop and restaurant (one-stop shop).



## 15 -17 November, Heiligenblut Interpädagogica

For years the Austrian national parks have showcased their environmental education programme at this trade fair. These programmes are a popular addition to everyday school life. In 2018, the Hohe Tauern National Park presented new materials from the Waterschool and its climate school (Klimaschule).

The Hohe Tauern National Park assists over 30,000 school pupil every year.



#### 27 November, Winklern

## National Park partner schools – successful school project goes into added time

The successful partner school project between the Hohe Tauern National Park and the schools in the national park municipalities is going into added time and has been secured for four more years. This specifically relates to an agreement with the elementary schools in Heiligenblut, Grosskirchheim, Mörtschach, Obervellach, Mallnitz, Malta and Winklern as well as the Winklern secondary school.



#### 6 December, Mittersill Final exam for rangers

Eighteen prospective rangers were successful and passed the final exam at the Mittersill National Park Centre. After two years of intensive training and successfully passing an oral and a written exam, they received their certificates to say they had qualified as a "Certified Austrian National Park Ranger". The National Park Ranger training programme is in scientific and educational terms very challenging. (Additional photos, Pg. 37)



#### 7 December, Mittersill

## A photographic declaration of love to the Hohe Tauern

"Wildnis Hochgebirge" (Engl. Mountain wilderness) is not just a book about mountains. In collaboration with Ferdinand Rieder, mountain guide and a ranger in the national park for 32 years, an illustrated book has been created which reflects his intimate knowledge of landscape and nature in touching and often meditative images. Short texts from Alp expert Stefan König say all that is needed.

#### Nationalparks Austria

We, the six Austrian national parks ...



 $\dots$  protect and investigate nature, provide information and offer recreation.

## Our national parks are committed to the objectives of the International Union for Conservation of Nature IUCN. In particular:

- Free evolution of nature (wilderness protection) without human intervention
- Making nature an experience and offering recreation at the highest level
- Researching about the scientifically based conservation of nature
- Protecting small habitats and buoy the region
- Ensuring modern partnership-based nature conservation

#### Umbrella organisation and network

To intensify collaboration between the Austrian national parks, the umbrella organisation "Nationalparks Austria" was established in 2011. Joint activities are used to boost public awareness about the value of national natural heritage and target important progress in research, education and nature conservation.

The eight national park administrations host joint activities in cooperation with the BMNT and the three national park forest enterprises. This coordination group convened a total of three times in 2018. The advisory board of Nationalparks Austria is to hand acting as a consulting and evaluating body. It held a meeting in 2018.

The general assembly of the association and the association's board both gathered once each in 2018. Peter Rupitsch was elected as the new chair of the association in February 2018, thus succeeding Erich Mayrhofer.

One important milestone achieved in 2018 was the joint development of a standard uniform for all Austrian national parks. An exclusive design was developed in the colours of Nationalparks Austria as part of a collaboration with the company Hyphen. With production, it was ensured that the uniform could be made in Europe and sustainably too. The uniform could be seen in action for the first time at the harvest festival in Vienna.



New uniform

## Public Relations Nationalparks Austria 2015–2018

The ultimate objective of this project is to strengthen the awareness for the Austrian national parks amongst the Austrian public. The main focus was on the development of the umbrella brand and the resulting umbrella brand campaign. In keeping with the slogan of "Nichts berührt uns wie das Unberührte" (Engl. Nothing touches us like the untouched), the national parks have been represented in various communication channels



The Nationalparks Austria page on Facebook has in the region of 7,000 likes. More than 1,200 people follow the news from the national parks on Instagram.

and at multiple events since 2016. Apart from continuing with the umbrella brand campaign, 2018 saw a focus being placed on social media.

#### Key milestones:

- January 2018: "Winter wilderness" press trip to the Kalkalpen and Gesäuse National Parks
- March 2018: Development of a social media strategy for Nationalparks Austria
- April 2018: Launch of the Nationalparks Austria Instagram account and professional management of the Facebook page
- May 2018: Blogger event on "Day of the parks"
- July 2018: Production of the brochure "Time for Nature" with a circulation of 155,800 units as a courier supplement
- August/September 2018: TV campaign with adverts from the Thayatal, Hohe Tauern and Donau-Auen National Parks
- October 2018: Presentation and publication of the works of the 13 recipients of the 2018 media bursary

The "Nationalparks Austria Public Relations 2015–2018" project ended on 31 October 2018.



Three media bursary recipients travelled around the Hohe Tauern National Park and delivered excellent photographic and video material.

#### Web info:

www.nationalparksaustria.at and www.facebook.com/NationalparksAustria and www.instagram.com/nationalparksaustria

## SEZUM: Service, Zusammenarbeit, Umsetzung (Engl. Service, cooperation implementation)

SEZUM was successfully concluded in May 2018. As part of this project, important milestones were achieved through the cooperation of the eight national park administrations, such as the adoption of a joint research mission statement, the initiation of the Nationalparks Austria training academy, the awarding of science prizes for research conducted in the national parks and the holding of the sixth Nationalparks Austria research symposium.



Thirteen media bursary recipients visited the six Austrian National Parks in 2018 and delivered impressive works of photography, literature and video. The results are used for Nationalsparks Austria public relations work.

#### Nationalparks Austria

BEFIT: Bildung, Erfahrung, Forschung, Interessen, Tourismus (Engl. Education, Experience, Research, Interests, Tourism)

The successor to the SEZUM project, BEFIT, was devised to build on the work of the previous project and define further steps to strengthen the position of the national parks until the end of 2020. For example, a "Tourism Position Paper" and an overview of the natural heritage in the national parks (FFH and red list species, habitats, protected resources, etc.) will be developed. Successful measures of the past, such as the Nationalparks Austria annual conference and the Nationalparks Austria employee day, will be revisited. Conducting a certified ranger course and developing systems that support and improved collaboration between national parks complete the package.

#### Position paper

#### "Tourism in Austria's national parks"

In line with the objectives of the National Park Strategy Austria 2020+ and as a result of a workshop series with Christian Baumgartner (expert in the field of sustainable tourism and CEO of "response & ability"), the six Austrian National Parks have jointly compiled the position paper "Tourism in Austria's national parks". It addresses the subject of tourism in the national parks and national park regions and is intended to serve as an orientation and decision guide for national park administrations as well as tourism policymakers. Adoption of the paper is planned for spring 2019 in consultation with the NPA advisory board.



#### Nationalparks Austria open data

For several years now, the six Austrian national parks have been operating jointly the metadata platform "parcs.at" and make metadata available, e.g. publications, projects and data such as GIS/Geodata. Since the findings obtained are not only interesting for the national parks but also useful for other research institutions and protected areas, work is being conducted to create an interface for "parcs.at" with data.gv.at – Austria's open data" as part of open data initiatives.

Since March 2018 all Austrian national park metadata are available for publications and geo-vector data are available on "data.gv.at". The subject coverage is as varied as the national parks themselves: It ranges from geodata such as the national park boundaries, reports on glacier measuring projects and ornithological monitoring to activity reports of the national park administrations in the sense of a transparent public administration. The parcs.at metadata can also be found in the new GoogleDatasetSearch.

#### Web info:

www.parcs.at and www.data.gv.at



The working group met several times with the expert Christian Baumgartner.

#### International matters

#### ALPARC

The Alpine Network of Protected Areas was established in 1995 and brings together all categories of large protected areas within the Alpine Convention area. Its goal is the concrete application of the Alpine Convention's protocol "Nature Conservation and Landscape Care". The exchange between personnel from the respective protected areas on practices, expertise and experiences on common topics is a priority here. Furthermore, joint projects are being conducted continually (e.g. AlpBioNet2030). The Hohe Tauern National Park has been involved from the onset. The ALPARC secretariat, based in Chambèry, France, provides valuable support with the implementation of projects.

#### Web info:

http://www.alparc.org

#### AlpBioNet2030

With ALPARC, the Alpine Network of Protected Areas, assuming the lead in this partnership project, numerous institutions from the entire Alp region have been working together on questions relating to ecological connectivity and the coexistence of man and nature as part of the "Alp-BioNet2030" project. The subjects reach from barriers/fragmentation in the Alp region to recreational usage conflicts resulting from popular sporting activities or the impact of different hunting systems in the Alps. In keeping with the philosophy that nature knows no boundaries, the Hohe Tauern National Park Tyrol/Carinthia is part of a pilot working region together with the Rieserferner-Ahrn Nature Park.

#### The following activities were undertaken in 2018

- Lead-free trial
- Surveys on human-nature relations of sixth form students in Bruneck and Lienz secondary schools together with EU-RAC Bozen
- Analysis of recreational use (human-nature interaction) in the protected areas



Networking meetings in Toblach in March.

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Together with the "Institut für Grundlagenforschung – IGF" (Institute for fundamental research), a survey was conducted across the entire pilot working region on the subject of using lead-free ammunition. The use of lead-free ammunition is important not only for "healthy venison" but also in relation to lead poisoning in scavengers such as the bearded vulture.

67% of the hunters in the pilot working region are already following this topic with some interest and more than 80% feel they are "very well" or "reasonably" informed. Nearly 40% of hunters in the pilot working region already use lead-free ammunition.

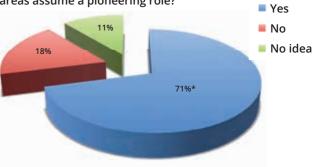
71% of the survey respondents believe that the protected areas and hunters in the protected areas should assume a pioneering role.

#### Web info:

http://www.alpine-space.eu/projects/alpbionet2030/

#### Pioneering role

"Should protected areas and the hunters in protected areas assume a pioneering role?"



\* "Yes": Carinthia 69 %, Tyrol 71 %, South Tyrol 72 %

#### Other international collaborations:

- ISCAR-P (Int. Scientific Committee on Research in the Alps for Protected Areas & Editorial Board of eco.mont)
- International Bearded Vulture Monitoring (IBM)
- EUROPARC (European Park Federation)
- IUCN (International Union for Conservation of Nature)
- VCF (Vulture Conservation Foundation)





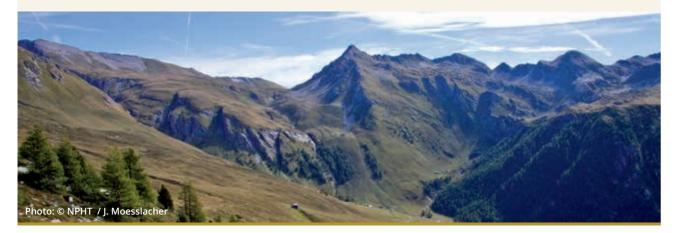


#### Natural resource management

The primary objective of the IUCN Category II National Parks is the protection of natural biodiversity along with its underlying ecological structure and supporting environmental processes, i.e. free natural development and the promotion of education and recreation. According to the IUCN guidelines, 75% of the area must be given priority in terms of the protection of the original nature and thus transformed into a zone no longer used by humans.

#### The following applies to natural resource management in the Hohe Tauern National Park:

- Management pursues the objectives of the respective zoning (core zone with nature zone, outer zone, specially protected areas).
- In the core zone, only minor management measures are implemented, which serve to protect the natural biodiversity
  and promote its underlying ecological processes and reduce and offset anthropogenic influences.
- Sustainable management safeguards the biodiversity in the outer zone. Particular attention is paid to the requirements of Natura 2000.
- Regulatory instruments include contractual nature conservation, subsidies and accompanying measures such as visitor guidance, raising awareness and environmental education as well as research and monitoring.



## Cloven-hoofed game research

The Alpine ibex reintroduced to the Hohe Tauern in 1960 has been the main subject of the cross-border cloven-hoofed game research project. Although there is a considerable amount of research work across the Alps dedicated to this species of game, it still seems essential to collate more data, especially in the following aspects: On the one hand, most of the research to date took place in the less precipitous Western Alps and on the other hand, the ibex is genetically on very



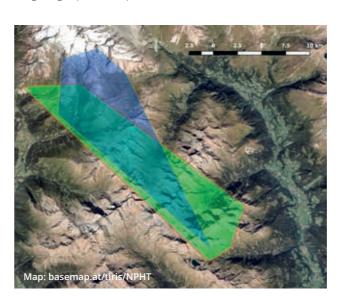
Ibex with ear tag in Ködnitztal.

shaky legs due to the many bottlenecks it has faced historically. In other words, the genetic bandwidth of this wild species and its ability to respond to a wide range of influencing factors is very minimal. And this is a wild species that already inhabits an extremely high-altitude habitat. Here, too, climate warming will entail significant changes in vegetation in the medium to long term, causing a change in the spatial behaviour of the animals and, secondly, the increased incidence of diseases (including new ones). And although the Hohe Tauern ibex population was formed with comparatively large numbers of animals of various origins, which mingled with the growth of sub-populations, studies in the past have shown that the population barely differs from other populations in the Alps in terms of genetic diversity, where significantly fewer numbers achieve exposure. In the 2018 cross-province census, just under 1,000 were counted. It is likely that the slightly lower number than in the previous year is attributable to the ongoing mange outbreak, but the result is still within the range of normal fluctuations that may occur with a census.

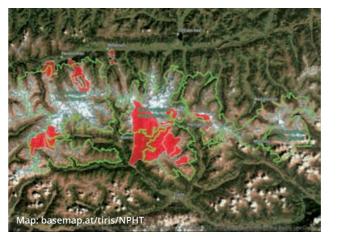
#### Cloven-hoofed game research

#### Spatial behaviour

In 2017 and 2018, tags were fitted to another four males and six females. In contrast to the question of the context of the sub-population within the Tauern region, which dominated until 2012, the focus is now on collating data for long-term research. This will enable conclusions to be drawn about changes in spatial behaviour in relation to temperature and season with any later comparative data. A student started a master's thesis in 2018 using older telemetry data on the extent of influence that any human activities have had on the spatial behaviour of this wild species. It compares data from the Swiss National Park, the Lechquellen Mountains and the Lechquellen Mountains and Hohe Tauern. Furthermore, animals are still being visibly marked, i.e. having their ears tagged. Even if it is not possible to fully document home ranges in this way, it is still possible to determine minimum sizes or large migrations, if sighting reports are passed on.



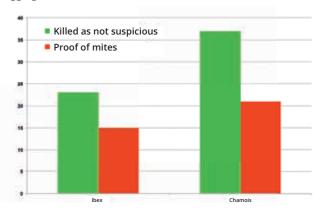
Even the home ranges observed of two marked males moving between the Glockner and Schober Groups, without the use of any probes, indicate the vast areas covered by this wild species.



Areas in which samples were taken in 2017 to identify passive mange carriers.

#### Diseases

The national park is primarily dedicated to researching mange with its studies. To this end, samples were analysed on the basis of the question of how high the percentage of passive mite carriers in chamois and ibex is, i.e. how many animals regarded healthy before being killed carry this pathogen but have not become ill themselves. Evidence of mange mites in the tagging area was found in 36 out of 60 healthy animals killed, whereby the percentage of passive mite carriers was higher in ibex at 65 % than in chamois at 57 %. In the control group consisting of visually ill animals, the mange mite in the tagging area could be detected in all cases.



	Province	Male	Female	Kid	Total	Total/ year
	Carinthia	10	2		12	
Mange 2018	Salzburg	2			2	42
2016	Tyrol	22	5	1	28	

#### Horn surveying

The annual horn survey was also carried out on ibex shot or found dead outside the nature zone. At the same time, older horns from the Hohe Tauern are measured where possible. This data enables a comparison with previous decades as annual horn growth is dependent on factors such as weather and population density. So far, it has been possible to measure the horns of 531 males from the Hohe Tauern with the oldest one dating back to a male killed in 1961.

#### Collaboration with the ibex hunting community

The cross-province lbex Day took place in East Tyrol and was organised by the Kals hunting association. For decades, this event has been a fixture in the collaboration between hunting communities, hunters as and the Hohe Tauern National Park.

#### Web info:

www.hohetauern.at/forschung/schalenwildmonitoring

#### Large birds of prey

In 2018, 29 young **bearded vultures** flew in the wild across the Alps. This means that the number of successful wild broods increased to 233, exceeding the number of young vultures released since the beginning of the Alp-wide project of 223 for the very first time. However, these encouraging numbers should not deflect from the fact that a total of around 250 animals is still a small population that still needs considerable protection.

used to this end. The "Lords of the skies" newsletter is also very popular. This is reflected in the increased number of sighting reports, amongst other things.

Furthermore, the **golden eagle population** and its reproductive success in the region of the national park increased once more in 2018. Here, 13 fledged young eagles have been confirmed. Reproductive success fluctuates each year considera-



Kruml 5 was unable to fly due to low blood calcium levels and had to be captured. Having undergone therapy and made progress in terms of flying at the Haringsee centre for bearded vultures, this female – according to genetic analysis – could be released back into the wild in Krumltal. She was immediately recognised by her bird parents and fully re-adopted.

A significant challenge is to increase the species' genetic diversity, as many bearded vultures living in the Alps today are closely related. Despite the positive development in the Alps, there are considerable regional differences. While the number of breeding pairs and young birds is relatively high and the first density-dependent mechanisms are taking effect in the Central Alps, there is still room for improvement in the Southern/Western and Eastern Alps. In Austria, two young vultures were released into the wild in the Krumltal and the Katschberg region this year. The population shows are very high fluctuation, a high loss of adult birds and a high mortality rate. Lead poisoning has been identified as a possible leading cause. Therefore, the Hohe Tauern National Park started initiatives to promote lead-free rifle ammunition and monitoring has been intensified.

At the beginning of June, the first **griffon vultures** from Friuli flew back into the Hohe Tauern feeding on the carcasses of dead domestic and wild animals. A total of 60 griffon vultures were counted mainly between Felbertal and Gastein. During the summer, there were repeated sightings of a **cinereous vulture** too. In the year under review, measures were once conducted to promote environmental awareness and to raise awareness for the "large griffons". Social media was heavily

bly, but this depends on many factors and is typical for golden eagles. The minimum number of young birds determined in the course of the surveys varies between 13 and 22 animals for the entire national park and surrounding areas. On average, over the years, it is currently possible to assume a constant population of approximately 42 to 43 pairs.

#### Web info

#### www.hohetauern.at/forschung/greifvogelmonitoring



The flight path of F 75 shows the vast mobility of griffon vultures, proves their wide-ranging network and shows how important international cooperation is for the protection of vultures.

#### **Chamois in Carinthia**

#### Background and objectives

The chamois is the main wild animal species in the national park and the emblem of the Carinthian Hunting Association. Various discussions about this noble species within the hunting community led to a research project starting in 2013, with the primary goal of detecting and analysing the chamois population in the national park municipality of Heiligenblut am Grossglockner.

In close cooperation with the local hunting community, it was possible to conduct accurate annual censuses and telemetry surveys of the chamois during the project time frame of 2013–2018.



Female chamois with kid.

#### Chamois censuses

The annual censuses yielded on average 1,246 chamois divided into 480 female goats, 307 kids, 108 yearlings, 262 male goats and 89 undefined animals. This gives a gender ratio of 1:1.5. The excess of female goats can probably be attributed to the fact that younger animals are assigned to females when covering long distances in the pack and also to the fact that at the time of the census, the one or other male goat was in its resting area.

The survival rate of offspring in the wild during a mild winter has been proven to be about 50 % and drops to 30 % for a hard winter – such as the winter 2017/18 with its heavy snowfalls. This is why a kid and yearling hunt in the high-mountain regions is not mandatory.

The chamois population in Hegering Heiligenblut is considered to be sustainable due to the census results with the current increase of about 10–11%, while the chamois population is subject to a slight downward trend across all of Austria.

#### Spatial behaviour

In order to explore the spatial behaviour of the chamois, two female goats (aged nine and four years), a male and a male yearling were fitted with GPS transmitters. A live trap was used to fit the transmitters.

The differing spatial behaviours of the two females, which also had a kid with them for the duration of the project is interesting. While the younger female did not wander far from its location, the nine-year-old female proved surprising with a range of approximately 450 ha. This behaviour once again highlights the need for multi-territorial planning.

The tagged male confirmed the daylight activity of the chamois and pursued the strategy of short distances during the winter months. This could be calculated by comparing position data with climate data (sunlight, precipitation, exposure).

#### Global warming and diseases

Global warming has led to the vegetation period starting prematurely. However, kids are only produced from mid-May to early June. This results in a poorer nutritional situation for the young, the risk of disease (parasites, possible new diseases) increases, which is reflected in higher mortality rates.

The increase in various recreational activities in the winter months should not go unmentioned, as this can also lead to shortfalls in the chamois in every age group.



Small area used as habitat by the male goat "Hans!" on sunlit slopes exposed on the north side in January 2017.

Note: Chamois censuses are conducted in every research area in the national park.

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## IUCN delegation in "Sulzbach valleys' wilderness"

The National Park Management Plan, as well as the Government Agreement of the Provincial Government of Salzburg, envision the Sulzbach valleys' wilderness of achieving the IUCN category Ib. In early September, an IUCN delegation visited the region with representatives of the WWF to inspect the area and local management. During the inspections and expert discussions, Andrej Sovince, the head of the delegation, was captivated by the natural space with its wild yet unspoilt nature, natural dynamism and uniqueness and was impressed by the national park management. The technically and physically clear delineation of the wilderness area to the surrounding IUCN nature zones and massive infrastructure facilities as well as the non-partitioning of the wilderness area into different zones are viewed very positively. The protection strategy of the combination of sovereign protection and private law agreements impressed him with the example of the fishing. In order to protect the wilderness area with regard to the practice fishing not included in the ban, a long-term leasing agreement was concluded with the fishing rights holder on the Obersulzbach and Untersulzbach, together with tributaries. This means negative impacts can be halted in the wilderness area as well as from the outside. The delegation was also very taken by the wilderness education program with the wilderness school and wilderness camps.



## Nature and landscape management plan for Hintersee



Silting zone at Hintersee.

Lake Hintersee is located at the head of Felbertal valley and was dammed by a landslide. In 1933, it was declared the first natural monument by the Province of Salzburg. Since 1984, the lake, as well as large areas of the surrounding area, have been integrated into the core zone of the Hohe Tauern National Park. Until a few years ago, it was still about 550 m long and up to 10 m deep. Intensive gravel and boulder transport has caused the western part of the lake to silt up. Currently, this part is almost fully separated from the rest of the lake. A themed trail guides you from the car park to the north side of the lake. The lake's surrounding area is used as mountain pasture land. Hintersee is easy to reach and is one of the national park's hotspots with around 80,000 visitors each year. It is particularly popular with families and older peoples, with locals and visitors to the area, especially with Arab guests in recent times. Hintersee is also the starting point for the Alp trail and historic mule track to Felbertauern. Its abundance of fish makes it a fly fisherman's paradise.

An integral showcase project has been devised for this hotspot together with all stakeholders there with the nature and landscape management plan. The objective is to preserve Hintersee as a body of standing water. For this purpose, a combination of the creation of retention areas for the debris at the alluvial fan and the delta will be reclaimed. Furthermore, wetland habitats on the lakeside should be protected. Contractual nature conservation agreements have been concluded with the relevant landowners. Accompanying visitor management measures envisage a strengthening of the central axis: car park – Gamsblickhütte hut – Schleierfall waterfall view, and new considerations relating to the car park (size, clear demarcation, toilet facilities, rubbish disposal island and overview boards) and the picnic area.

#### Nature zone – what is that?

According to the International Union for Conservation of Nature (IUCN), 75 % of the national park's area must be out of use in a protected area in order to be entitled to use or bear the name "National Park". This is just one of the requirements that national parks across the globe have to observe. Compliance is checked by members of the commission before awarding the title of "National Park" and then at irregular intervals. Compliance with these requirements means that the Hohe Tauern National Park, among other things, is ensured funds made available by the federal and provincial governments, which, for example, secure various subsidies of all kinds. Due to its size and some historical background, the Hohe Tauern National Park was able to achieve that "only" 75 % of its core zone had to be put out of use to receive this international award. These exemptions mainly related to agricultural, forestry and hunting use.

In the Tyrolean part, the necessary space was secured through private law agreements, most of which were negotiated between 2002 and 2005 with the landowners or tenants, and must be repeatedly renegotiated. Compensation is paid within the framework of the contractual nature conservation for

these waivers of use, the rates for which have been decided by the Tyrolean National Park Board of Trustees and are indexed each time a new contract is concluded or are also subject to indexation during the term of the contract. In the case of sums relating to leases of any kind, it is clear that the ha rates paid according to the lease agreement are used. Furthermore, small bonus amounts are also paid out for the conclusion of a contract. At present, around 28,000 ha in the Tyrolean part of the Hohe Tauern National Park are subject to such exemptions, which is safeguarded by around 70 contracts. Together, these areas form the so-called nature zone within the core zone of the national park. It is advisable to increasingly move the emphasis of agreements more and more in the direction of the landowners, which should raise the understanding and commitment to the protected area in the long term. At the same time, the Hohe Tauern Tyrol National Park Fund is currently the tenant of five of the 33 hunting grounds in the core zone. These are the private hunting grounds of Innergschlösser Kuhalpe, Innergschlösser Ochsenalpe, Aussergschlöss as well as Jagdhausalpe and Umbalalpe.



View of the Venediger Group

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#### Science & research

Across the globe, national parks are places of research (cf. National Park System Advisory Board 2009). The spectacular high mountain landscape of the Hohe Tauern National Park has always fascinated people and led to the first scientific studies there more than 200 years ago.

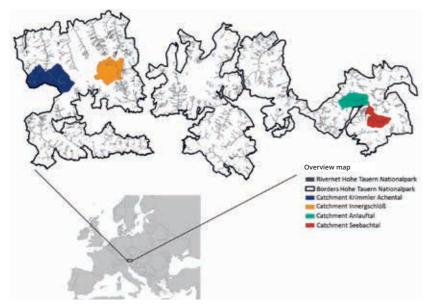
The Hohe Tauern National Park, an internationally recognised IUCN Category II protected area and Central Europe's largest national park, sees science and research as an essential business sector. Since its establishment, the national park has been supported by a large number of research institutions and projects. Protected area research is an essential task for the future of the Hohe Tauern National Park – not least because of the location of the protected area and thus large "untouched" areas and high Alpine habitats in the middle of the main ridge of the Eastern Alps. Research projects in the Hohe Tauern National Park cover the both the northern and southern slopes of the Hohe Tauern and thus overcome political boundaries.



### Monitoring of waters

Even in mountainous areas, it is expected that climate change will strongly affect the hydrology and geomorphology of river landscapes, which will result in a significant change in the volume and composition of meltwater and thus in aquatic ecol-

ogy. Therefore, the causal relationships between hydrology/ glaciology – geomorphology – ecology/biodiversity will be the focus of attention in the water monitoring. As early as 2009, the idea for a project to carry out long-term ecological surveys on mountain streams and thus to create the basis for a consistent recording of biotic and abiotic parameters in the protected area was put into practice.



Overview map of the bodies of water being monitored in the Hohe Tauern National Park.

For this purpose, 18 trial sites were set up in the valleys of Krimmler Achental, Anlauftal, Seebachtal and Innergschlöss, where site conditions and environmental factors, as well as biodiversity, are precisely measured and recorded. In all four areas, the abiotic factors (temperature, water chemistry, flow velocity and water depth) are researched annually. The biological investigations (macrozoobenthos, growth, content of organic material) are carried out every three years. The project involves identifying climate-related changes and their potential impact on ecosystems. The real tools of long-term observation are the communities of the mountain streams and rivers. Here the outstanding indicator function of insects living in and on the water and other invertebrates is used.

#### Monitoring of waters

#### Results

Results to date indicate that in the course of the ongoing monitoring of water temperature, anomalies emerge especially during the summer months. Starting from 2010 up to the time of evaluation in 2017, increasing water temperatures (daily mean values) were detected at all measuring sites, whereby the most substantial mean increase of + 0.8°C per year in Seebachtal, in the glacial stream above the forest line, was documented.

The duration of monitoring is still too short in order to be able to make an association between the biotic shifts in the investigated bodies of water and climate change. Nevertheless, initial trends can be identified and changes in the benthic communities (invertebrates colonising the bottom of the river) can be observed. In Anlauftal (Salzburg), the density of individuals living at the bottom of all four bodies of water has increased. An increase can also be seen in the number of large groups of macrozoobenthos present. The relates primarily to the family of chironomidae); furthermore, the group of baetidae (family of baetid mayflies) dominate along with that of the simuliidae (black flies). In the water monitoring sites in Krimmler Achental (Salzburg), an increase of these two parameters - individual density and number of large groups at the bottom of the water monitoring site – can also be proven. In Seebachtal (Carinthia), the most significant change in the biotic parameters of the study is the clear increase in the number chironomids, which, to a greater extent, determine the benthic biocoenosis there.

A variety of measuring instruments are used for the biotic and abiotic analysis of the aquatic habitats in the Hohe Tauern National Park. Here you can see the team from the University of Innsbruck with water expert Leopold Füreder at the annual sampling of the water monitoring sites.

However, researchers attribute this to frequently occurring flood events and the fact that chironomids prefer such harsh living conditions. A significant increase in the number of large groups can be proven in the six water monitoring sites in Innergschlöss (Tyrol). Researchers see this biotic change related to the steady warming of rivers in the Alps, which could already be detected in the course of this project to some extent. The warming causes a colonisation of species that are not adapted to adverse living conditions (e.g. cold water temperatures).

The recording of ecosystem processes is one of the central research assignments in the Hohe Tauern National Park. The diversity of aquatic ecosystems and the diversity of their typical characteristics, but also because of the low anthropogenic impact mean the national park is an ideal research area for this type of long-term observation relating to making the effects of climate change visible and understandable.

#### info:

https://hohetauern.at/forschung/gewaessermonitoring





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## Ecological long-term monitoring

The four national park valleys Seebachtal (Carinthia), Oberand Untersulzbachtal (Salzburg) and Innergschlöss (Tyrol) were united in a pilot project focussing on the theme of living at existential limits in the high mountains ("Leben an Existenzgrenzen im Hochgebirge") in order to establish a new research focus in the Hohe Tauern region. Using a permanently established monitoring system shall make it possible to draw conclusions ins the future about changes in Alpine ecosystems caused by environmental changes, such as an increase in CO<sup>2</sup> emissions, or nitrogen input.

Eight different disciplines were successfully united with the realisation of this project. Since the summer of 2017, high mountain areas in the core zone of the national park have been examined in detail as part of this ecological long-term monitoring project. The Austrian universities and technical institutions listed below are entrusted with the development of this project:

- Location climate, soil physics, soil chemistry, productivity University of Innsbruck, Ulrike Tappeiner
- Botanical vegetation analysis Haus der Natur Salzburg, Ennacon KG
- Soil mesofauna- University of Innsbruck, Erwin Meyer
- Culture-dependent analysis of soil bacteria composition University of Graz, Martin Grube
- Hydrological, chemical and biological signals in micro-catchments University of Innsbruck, Leopold Füreder
- Large herbivores University of Natural Resources and Life Sciences, Vienna, Klaus Hackländer
- Cryosphere: Glaciers, hydroclimate, permafrost, geomorphodynamics University of Graz, Gerhard Karl Lieb
- Zooplankton communities and abiotic parameters in Alpine lakes - University of Salzburg, Stephen Wickham



Photographic documentation of the vegetation and the extant species assemblage at the permanent observation areas carried out down to the last detail (raster method, digital camera at maximum resolution in the standardised form). Seebachtal, Carinthia

A total of 14 permanent observation areas (transects) were marked in order to show which ecological changes occur in the high mountains in a tiny space. Each transect comprises three contiguous strips of land 10 metres long and 1 metre wide, reflecting the living conditions of extremely pronounced environmental gradients. A pronounced environmental gradient ideally stretches from spots that are uninhabitable for flowering plants (snow-covered ground, pessimal living conditions) to the maximum of possible productivity and biodiversity (fully developed Alpine grasslands, ideal living conditions). It is along these gradients where plant and animal species and the tiniest of micro-organisms find their existential limits. This is why biomass, occurring vegetation units as well as soil zoology and, with it, soil bacterial diversity are placed at the centre of scientific observation and scrutinised in the course of sampling.



Extraction of a soil sample by Erwin Meyer, for the identification of mite individuals and springtails later in the soil laboratory at the University of Innsbruck. Sampling using modified O'Connor split corer (Ø 5 cm) and subdivision into vertical fractions of 0–5, 5–10 and 10–15 cm depth.

102 biomass samples were harvested in 2018 alone and are currently being analysed in the soil laboratory at the University of Innsbruck. So far, it has become apparent in some of the subterranean fauna examined that mites have the lowest population density in the area ofsnow-covered ground and this increases along the gradient up to the optimal living conditions (area of the Carpathian grasslands). In contrast, no such pronounced gradient can be detected in the group of springtails. In order to be able to describe such trends, around 90 suction and 200 soil samples were collected as part of field work in 2018. A total of 6,000 mite individuals and 5,518 springtails were sorted.





The University of Natural Resources and Life Sciences uses special timelapse cameras. These serve to determine habitat use by ruminant farm and wild animals and to quantify occurring species along the altitudinal gradient – from the tree line to the vegetation-free zone.

It is crucial for climate parameters to be continuously monitored in order to find an explanation into what extent all these recorded biotic parameters interact with abiotic parameters. Around 42 temperature loggers are used to measure the soil temperature over the entire surface of the transects at a depth of 4 cm and intervals of three hours. All three investigation areas also have simple micro-climate stations that record the air temperature on an hourly basis. Temperature data loggers are also used in the monitored lakes to make the effects of global change on key influencing variables in standing wa-

ters more tangible in the coming decades. The rapid temperature rise of the lakes in spring is regarded as an initial trend. For example, the lake Salzbodensee (Innergschlöss, Tyrol) experiences an increase of 15°C in just two weeks. In terms of the future, it is now necessary to observe whether such rapid temperature increases will be even faster or whether an earlier start to the ice-free period can be expected. And to what extent such environmental changes have an impact on ecological communities in the lakes. For this reason, samples are taken once a year per lake during the summer months and analysed in the water laboratory of the University of Salzburg. The focus is on the species composition and long-term development of the communities of zooplankton (animal organisms that move with the help of the current), algae and macrozoobenthos (invertebrates that colonize the bottom of the water body). For the first time in the Hohe Tauern National Park, 18 lakes are now available for long-term ecological monitoring and in-depth scientific scrutiny.

The documentation of what is recorded in the terrain, at what location and at what time plays a very central role in the course of a long-term monitoring project. Therefore, the individual samples from all eight sub-disciplines are recorded in newly developed recording sheets and according to a standard procedure specifically developed for this purpose. This ensures that all these investigations can be recorded by other generations of researchers even after decades and that the results will remain comparable at all times.

#### Web info:

www.hohetauern.at/forschung/langzeitmonitoring



The University of Salzburg team taking water samples in 2018.

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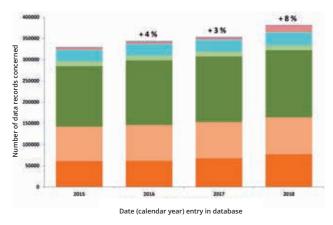
## **Biodiversity database**

In the national park's biodiversity database, data on occurrence, distribution, ecology and endangerment of the animal, plant and fungi species is collated, standardised, centrally administered, evaluated and made available.

As of October 2018, 381,709 data records relating to 12,685 different taxa (species, subspecies, hybrids, varieties) and 29,126 sites from 518 data sources (commissioned projects, Biodiversity Days, collections, publications, expert reports) as well as from 1,276 observers were registered, representing an increase of 28,112 data records compared with the previous year, which corresponds to an increase of around 8%.

A biodiversity report is currently being prepared which will provide a substantiated overview of the state of knowledge on the species that have been identified to date in the Hohe Tauern National Park, as well as highlight deficits and recommendations for action.

#### Nationalparks Austria biodiversity database



■ Other groups of organisms ■ Fungi ■ Lichens ■ Mosses ■ Flowering plants and ferns ■ Insects ■ Vertebrates

The Austrian national parks are working on a common infrastructure for the unified management of their biodiversity data. The joint operation should generate synergies. For some partners, this initiative enables the introduction of a biodiversity database for the very first time. The Kalkalpen National Park is providing the necessary database server. In the future, it will be possible to register finds online.

#### 12th Day of Biodiversity

From 10 to 12 August 2018, the national park was once again dedicated to the cause of biodiversity – this year in the wilderness area of the Sulzbach valleys (municipality of Neukirchen am Grossvenediger, Salzburg). About 30 experts for the organism groups of flowering plants and ferns, lichens, dragonflies, grasshoppers, cicadas, butterflies, wild bees (incl. bumble bees), beetles, birds, amphibians, reptiles and mammals (especially bats) succeeded in collating valuable information for the biodiversity database once again.

In order to record the biodiversity of the wilderness area in the best possible way and systematically, three survey areas were selected in the high mountain regions: The areas from Aschamalm up to the glacier in Untersulzbachtal, from Oberer Keesboden (cable car station) up to Keeskogel above Kürsing-



The red underwing was recorded for the first time within the confines of the Salzburg National Park.

erhütte and from Hofrat-Keller-Hütte up to Jaidbachkees in Obersulzbachtal were walked and examined.

Particularly remarkable was the observation of the red underwing (*catocala nupta* – noctuid family) in the area of the rocky terrain of Oberer Keesboden (Obersulzbachtal), at almost 2,000 m above sea level – a species of butterfly that usually inhabits forests at lower altitudes.

It was also possible to collect valuable specimens for identifying lichens too. From a height of 2,870 m up to Keeskogel, 30 to 40 species were investigated, including many lichen species found in the rock.



Mountain meadows rich with species in the Hohe Tauern National Park.

## The red-spotted bluethroat

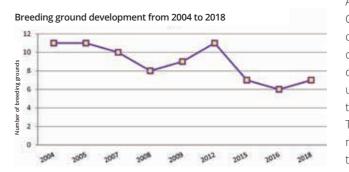


The red-spotted bluethroat (*luscinia svecica svecica*) is an Annex I species of the Birds Directive and is therefore protected throughout Europe. The males have a blue bib with a red spot, hence the name.

The red-spotted bluethroat's main geographic range stretches from Scandinavia across Siberia to Alaska. The European continuance amounts to 4 to 6 million breeding pairs. The breeding areas in the Alps and Carpathians are comparatively small with 65 to 100 breeding pairs. The bluethroat was first discovered in the Hohe Tauern National Park in 1992 in Kleinelendtal and in 1999 in Grosselendtal in the national park municipality of Malta. There are other records from the Grossglockner High Alpine Road, from Gasteinertal, Seebachtal, Seidlwinkltal and Stubachtal as well as in Innergschlöss. Red-spotted bluethroats colonize damp, flat habitats, which are usually covered with mountain pines. They occupy the areas in May and migrate back to Africa at the end of August/beginning of September

#### Grosselental breeding population

Since 2004, scientific surveys have been carried out in Grosselendtal (with the financial support from the Österreichischer Alpenverein's sponsorship fund) to document the bluethroat population, identify dangers and develop measures. For a long time, the largest breeding population in the Alps was at Hundsfeldmoor near Obertauern (1981 best year with 21 pairs). This figure has been declining steadily for several years (only three



Between 2004 and 2018, 6 to 11 breeding pairs of the red-spotted bluethroat were detected in Grosselendtal. (Source: BirdLife Austria/province group Carinthia)

breeding pairs in 2015). The Swiss breeding population fluctuated between three and ten pairs between 2003 and 2012. Grosselendtal is currently home to the most important single population of the red-spotted bluethroat in Austria and the Alps.

#### Red-spotted bluethroat at risk?

This bird species is not at risk throughout Europe nor across the globe. With 28 to 46 breeding pairs, the stock in Austria is regarded as at risk from extinction. For a small marginal population, like the one in the Grosselendtal, there are numerous risk factors: Habitat change and loss (becoming overgrown, grazed too intensively), disturbances (hikers, dogs not on leads, animal photographers), natural enemies such as the fox. Unfavourable weather conditions in the breeding or wintering area can also lead to a decline.



The breeding ground of the red-spotted bluethroat in Grosselendtal in the outer zone of the Hohe Tauern National Park, Carinthia: a mosaic of mountain pines and dwarf shrubs, wetlands and open areas form the preferred habitat of this bird.

## Continued consistent implementation of protective measures

On the basis of the research results, it was possible to implement vital measures for the protection of the red-spotted bluethroat thanks to the collaboration between the Österreichischer Alpenverein, landowners, BirdLife Austria/province group of Carinthia and the Hohe Tauern National Park. Thus a nature conservation plan was and is being implemented by the landowners/Alpine pasture managers on the pasture land. Since only one brood is reared per year, these birds need quiet and undisturbed living conditions as far as possible above all during the mating, hatching and nestling-phase from June to August. Together with the Österreichischer Alpenverein and the German Alpine Club, a temporary closure of the Alpenvereinssteig to OsnabrückerHütte has been in force since 2009 – until 15 August each year – as a visitor management measure. The development of the population is monitored at regular intervals by BirdLife Austria/province group of Carinthia.

## Geomorphological monitoring of Sattelkar cirque

The average annual temperature in Austria has risen by around 2°C since 1880 and is well above the global average of 0.85°C. An increase in temperature higher than the global average is also expected for the Alps in future. An increase of up to 4°C up by 2100 is possible.

Cirques are characteristic landscape features of high mountains and react particularly sensitively to climatic changes. Glacier retreat is one of the most visible consequences, with the retreat of the ice exposing rock areas and loose material. However, there are also invisible changes, such as changes in permafrost, resulting in the weakening of the mountains and increased mobilization of loose material due to heavy precipitation. Possible consequences are the increased occurrence of landslides and debris flows and thus an increasing number of risks for humans and infrastructure.

2015, at up to 30 m/a. In August 2014, heavy precipitation led to a debris flow of 170,000 m³, which relocated the Obersulzbach river, damaged a vehicle and, together with a flood in Obersulzbachtal, led to severe devastation of the middle and lower reaches.

The project aims to develop, install and maintain a monitoring system for the long-term monitoring of the Sattelkar cirque and its neighbouring cirques. Atmospheric, surface and subsurface conditions are systematically and continuously monitored and serve as a basis for further research projects.

During the year under report, 15 temperature loggers were procured, configured, installed and positioned in Ofenkar, Mitterkar and Steinkar, nine GCPs (ground control point) were installed and positioned and a drone survey was conducted for



Installation ground control points (GCPs).

The Sattelkar cirgue, located between 2,130 m and 2,730 m above sea level, is a typical high Alpine cirque in Obersulzbachtal. It is characterised by slope debris and rockfall debris and was subjected to intense glacial and periglacial formation. There are indications of a fossil block glacier; several moraine walls are witnesses of the last glaciations. Due to the topographical position and altitude, sporadic occurrences of permafrost can be expected. Since 2003, an increased dynamic of mass shifts in the cirque has been seen; closed vegetation areas have been replaced by large areas of debris. Loose material has set itself in motion, starting at the cirque threshold and rapidly regressing since 2005. So far, it can be assumed that heavy precipitation causes the glacial and periglacial structures on the smooth rock surface to slip and flow away like a stream. Aerial photo analyses, witness reports and damage events document an increased activity of the circue and Mur events since 2005. Since then, the expansion and movement rate of the slide has increased. Meanwhile loose material with more than 10 m/a (metres/year) is moving over 13 ha and over 1,000,000 m<sup>3</sup>. Extreme rates of movement were recorded between 2012 and

the creation of orthophoto, surface and terrain models of the area. Furthermore, the locations for a surveillance camera and seismographs were analysed and planned. Public relations work such as the set-up of an info point, reports at symposia and a contribution to the ORF III documentary "Nature creates knowledge" rounded off the work in 2018.



Orthophoto, surface and terrain model, 2018.

#### Glacier mass balance Äusseres Mullwitzkees

#### Venediger Group

Since 2006, a glacier mass balance has been carried out at Äusseres Mullwitzkees. The mass balance for 2017/2018 was clearly negative with a loss of -3.439 m³ due to the warm and dry summer.

With the exception of the mass balance of 2013/2014, Äusseres Mullwitzkees shows considerable mass losses since the beginning of recording and the results so far show that the current thinning of the Mullwitzkees ice will result in a massive area change at the existing melt rates, and thus a highly non-linear reaction of the glacier to climate change is imminent.

Project partners: Institut für Gebirgsforschung (IGF) der Österreichische Akademie der Wissenschaften (ÖAW) (Institute for Mountain Research at the Austrian Academy of Sciences), Hydrologischer Dienst des Landes Tirol (Hydrological Service of the Province of Tyrol).



Aerial view of Mullwitzkees glacier in the Venediger Group.

Annual status reports for "

2017/18

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#### Äusseres Mullwitzkees" Annual status report Balance year (in million m<sup>3</sup>) 2006/07 -4.461 2007/08 -1.980 2008/09 -1.474 2009/10 -1.481 2010/11 -3.819 2011/12 -3.741 2012/13 -0.638 2013/14 +0.342 2014/15 -4.475 2015/16 -2.382 2016/17 -3.721

Web info: www.gletscherwandel.net and www.parcs.at (all annual reports with results)

-3.439

## Research base Alte Prager Hütte & weather station

Alte Prager Hütte (2,489 m), a listed building since 2012, was largely renovated in 2017 and 2018 (in accordance with the status and plans 1872 Section Prag/Johann Stüdl). The cooperation of DAV, ÖAV (sponsorship funds, Hohe Tauern National Park) and the Hohe Tauern National Park ensured the financing of the renovation work. Alte Prager Hütte will shine in "new splendour" from 2019 and will not only be a primary research base but will also provide a genuine insight into an essential part of Alpine history and metallurgy in the Hohe Tauern.

The weather station near the hut, which was erected in late autumn 2018, provides regular images of the Schlatenkees glacier to document glacier development as well as information on air temperature, humidity, wind and global radiation.

#### Web info

www.hohetauern.at/webcamaph



Installation of the weather station near Alter Pragerhütte.

#### Additional research activities:

- Introduction of a systematic data management system and implementation of a central geodata management system for the Hohe Tauern National Park
- Control fishing in the course of the long-term monitoring project "Autochthonous brown trout"
- 2 x year meeting of the Scientific Advisory Board
- Design of a comprehensive vegetation mapping
- TV production "Land of the mountains nature creates knowledge"
- Continual input for PARCS.at data centre (http://www.parcs.at/npht/)
- Updating of the natural sciences bibliography of the Hohe Tauern National Park

#### Web info:

www.hohetauern.at/forschung

#### Cultural landscape of the outer zone

The outer zone of the national park primarily comprises the cultural landscape situated in the national park, where the conservation, care and design of the cultural landscape and the conservation of biodiversity are a priority. The outer zone comprises a total of around 64,400 ha.

#### The following objectives apply to these areas:

- Pastures: Management models suitable for national parks are developed for current or future requirements.
- **Forest:** Forest management should be near-natural, small-scale, gentle and linked to the potentially natural forest community. The multi-functionality of forests in the outer zone is to be further developed.



The Innerkees pasture in Krimml Achental is one of 353 Alpine pastures in 58 Alpine pasture regions of about 70 valleys in the three federal provinces in the Hohe Tauern National Park. (Source: Pastures, scientific literature, 2004)

## Alpine pastures characterise the high altitudes of the Hohe Tauern mountains

The division of the national park into an approximately 121,200 ha core zone and an approximately 64.400 ha outer zone has its origins in the close interlocking nature of primaeval landscape (rock, glacier and rubble areas) and cultivated land (Alpine pastures) – a characteristic feature of the national park.

The Alpine pastures – managed and cultivated for decades

– are a cleared, semi-open landscape with closely flanked by forest and grassland and diverse transition areas and boundaries, which were created by man by transforming closed forests during the course of the land's use. This type of landscape sets itself apart from the natural landscape of the core zone with a greater diversity of species and a varied landscape and forms the main focus of the outer zone of the protected area. The preservation, maintenance and design of the Alpine pastures and their high biodiversity are of public interest here.

	Ту	rol	Salzburg		Carinthia	
NATIONAL PARK ZONE	Area (ha)	Area (%)	Area (ha)	Area (%)	Area (ha)	Area (%)
OUTER ZONE	26,414	100	26,782	100	11,320	100
Non-grazing areas	15,793	60	20,433	76	7,220	64
Grazing areas	10,621	40	6,349	24	4,100	36
CORE ZONE	34,712	100	53,780	100	32,674	100
Non-grazing areas	31,959	92	46,892	87	28,359	87
Grazing areas	2,753	8	6,888	13	4,315	13
TOTAL	61,126	100	80,562	100	43,994	100

Overview of grazing and non-grazing areas in the Hohe Tauern National Park. (Source: Alpine pasture survey 2015–2016, eb&p Umweltbüro GmbH, Klagenfurt)

## Funding for Alpine pastures in Carinthia

National parks assume special responsibility for species and habitats of national and international importance. Protection priorities are differentiated according to zoning. In the nature zone/core zone, species whose habitat does not require any anthropogenic influence will be preserved or added in the longer term. In the conservation area/outer zone, priority is given to preserving species and habitats that require site adaptation, and usually extensive usage. National parks, therefore, protect both rare biotope types and their species spectra in particular, as well as endemic species and important habitats and retreats (cf. National Park Strategy, Austria 2020+). In the last decades, there has been an intensification of Alpine pasture management on the one hand, but also a non-utili-



Today, the pastures in the national park form the core of the Alpine cultural landscape in the Hohe Tauern. The discussion about the future of Alpine pastures has played an essential role in the course of the national park's creation. Particularly in the outer zone, the sustainable maintenance of a semi-natural cultural landscape typified by Alpine farming for preserving the biodiversity and the characteristic landscape is a primary goal.

sation of pastures on the other. In the outer zone and on a maximum of 25% of the core zone, a special Alpine pasture funding programme ensures that Alpine pasture management is adapted to the location – not intensified but also not a farming task.

## National park Alpine pasture funding programme in Carinthia

The Act on the Establishment of National Parks and Biosphere Reserves (Carinthian National Park and Biosphere Reserves Act), LGBl. No. 55/1983 as amended (Section 14 Paragraph 1) forms the legal basis.

## The main objective is to secure a site-adapted Alpine pasture management system in the protected area

- which preserves valuable habitats and species.
- which is adapted to the natural climate, soil and terrain conditions.
- which avoids sustainable damage to soil, vegetation and water through site-adapted grazing intensity.

The requirements and eligibility criteria are coordinated and compatible with the current ÖPUL programme.

#### Nature conservation plan on Alpine pasture land

The province of Carinthia offers project funding for Alpine pastures in Carinthia's protected areas with a nature conservation focus until 2020 (Rural Development 2014-2020).

Since 2016, Carinthia has been implementing "Nature conservation plan on Alpine pasture land" with a success-oriented approach.

Nature conservation objectives are defined individually for each pasture and the necessary measures are subsidised.

#### Objectives of the nature conservation plan:

- To conserve and promote the diversity of habitats and species.
- Location-adapted cultivation through pasture management and Alpine pasture maintenance.
- Biotope protection for individual areas. Adapted use for sensitive biotopes.
- Preservation and creation of structurally rich larch and rough pastures.
- Creating or preserving landscape elements such as dry stone walls and dry stone piles.

#### Eligibility criteria:

- The Alpine pasture must be located in a protected area or have a nature conservation focal point.
- The measure may not qualify for any other financial support.
- The measures requested are binding.



Excursion with pasture owners to Kühberg in Apriach

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#### Subsidy guidelines **NEW - Salzburg**

A study presented by the museum Haus der Natur in 2015 Traces of mule tracks from the past in the Hohe Tauern Nashowed massive changes in Hollersbachtal in connection with Alpine pasture management in the outer zone of the national park: Violations of the Habitats Directive, the Water Act and the Forestry Act, as well as the Salzburg National Park Act were, discussed.

The National Park Board of Trustees decided not only to counter the criticism by examining violations of the law but also to initiate a positive development for the future by restructuring the national park subsidies in terms of ecologisation. The Ministry also called for a revision of the subsidy guidelines, as large parts of the national park funding in relation to ÖPUL constitute double subsidisation and as such are not permitted. A working group (landowners, experts, national park) was set up and in parallel work was carried out on the National Park Management Plan, which defines the priorities in the funding guidelines for sustainable cultivation, biodiversity and indigenous breeds of domestic animals.

#### In autumn, new subsidy guidelines for the preservation of the cultural landscape were adopted with the following

- Compensation for additional pollution caused by national park management and the application of stricter approval criteria
- Funding of a national park-compliant Alpine pasture management extending beyond the ÖPUL criteria
- Funding of design measures
- Purchase premium for indigenous, endangered domestic animal breeds
- Contractual nature conservation to improve biodiversity



#### The vegetation history of the Felber Tauern

tional Park, which were part of a transalpine network of paths, point to an early ascent and human use of the sub-Alpine and Alpine mountain regions.

One of these famous historical Tauern crossings was the Felber Tauern. The old route structure is very well preserved particularly in Trudental and above the marshland. Archaeological finds from the Bronze and Iron Ages are indicators of prehistoric use of the area that can probably be traced back to the Mesolithic era. Scientific methods such as pollen analyses and radio-carbon investigations complement archaeological data collation and excavations with regard to environmental reconstructions, economic models and dating. Using a peat profile from the marshland, the natural and anthropogenic development of vegetation was investigated in order to draw conclusions about the diachronic development of the mule track and the cultural landscape of the Hohe Tauern.

The pollen diagram from the marshland along the mule track in the Felber Tauern reflects the development of vegetation and land use from the Bronze Age onwards. The high altitude usage is documented by an increased number of Alpine pasture and settlement indicators. As early as the Middle Bronze Age (1600–1300 B.C.), dwarf shrub heaths and Alpine grasses around the marshland are most probably used as high pastures. At the same time, settlement indicators also point towards the Alpine crossing being walked. The beginning of the Urnfield Period (approx. 1200 B.C.) was marked with climatic disruption that brought anthropogenic use to a standstill. Subsequently, it is possible to differentiate between a further five phases of use. The interruptions to settlement activity and pasture farming until Roman times correlated with climate parameters indicating colder and/or more humid phases. Due to the different growth rates of the moor and the standard sample distances, the most recent section was only roughly developed from the Middle Ages onwards, so that the fluctuations of the settlement and grazing indicators can no longer be significantly related to the climate parameters for the time

The supplementary radiocarbon dating supports these results. A piece of wood from a depth of 144 cm was used as the dating basis and was determined to have a 14C age of 3054 +/- 20 BP (before present). For the second sample, peat from Radizell was taken at a depth of 80 cm and dated to a <sup>14</sup>C age of 2109 +/- 19 BP. The third sample was taken at a depth of 40 cm from Braunmoos Radizell peat and shows <sup>14</sup>C age of 1875 +/- 18 BP.

Various sites on the marshland were surveyed and documented.

#### Protecting, preserving & tending the cultural landscape in Tyrol

The sustainably managed Alpine pastures with their typical cultural landscape buildings define the characteristic landscape of the outer zone and offer largely intact habitats and retreats for a varied fauna and flora. Anthropogenic elements in the form of buildings, fences and dry stone walls make up an essential component of this landscape. These not only represent folklore or cultural-historical values but also serve various ecological and landscape-aesthetic functions.

#### Priority areas:

- Preservation of the typical regional landscape
- Awards for the protection, conservation and care of the cultural landscape
- Promotion of indigenous domestic animal breeds typical for the Tyrolean Hohe Tauern National Park region



Biodiversity in Debanttal.

#### "National Park Certificate for Alpine Pastures" -Elaboration and implementation of pasture development concepts

In all three national park provinces, contractual nature conservation models and special support programmes for the conservation, protection and care of the cultural landscape have also been available for several years now. Pasture development concepts have been developed in the Tyrolean part of the Hohe Tauern National Park in recent years as part of the



Traditional construction methods (e.g. roof shingling) for Alpine huts.

pilot project "National Park Certificate for Pastures" and have already been implemented to some extent.

As part of the framework of another project, the widespread implementation of its planned measures will now take place in collaboration with the Tyrolean Chamber of Agriculture and the Lienz Agricultural College. The aim of the project is to implement measures for sustainable mountain pasture management and the promotion of biodiversity on mountain pastures in order to preserve the "good conservation status" of FFH habitats and increase structural diversity. The focus is on how the implementation of measures can work in line with farming and acceptance of mountain pasture farmers. The results of the implementation of the measures shall be passed on to students at the agricultural college, mountain pasture farmers, stakeholders and authorities in order to create a corresponding awareness of nature conservation and biodiversity.

#### NATIONAL PARK CERTIFICATE FOR MOUNTAIN PASTURES **Project modules**

#### Implementation of measures with technical support

- FFH improvement
- Biotone protection
- Preservation of a landscape mosaic with high biodiversity

#### Best practice example for cooperation between authorities

#### – pasture farmers – protected area administration

Creating awareness

#### Value creation in the population

- Cooperation with
- Maschinenring
- Additional income opportunities for young farmers

#### Adaptation possibilities to climate change

- Change in grazing concepts
- Problems with scrubland, reforestation, times for driving cattle to pastures

## **Education &** visitor information

The Austrian national parks have a legally defined educational mandate. According to the National parks Austria Strategy (2020+), Austrian national parks have played an essential role in national environmental education since their foundation.

The educational work of the Hohe Tauern National Park aims to generate enthusiasm for nature, to promote acceptance and empathy for nature conservation among both locals and guests, and ultimately to create an overall understanding of the protected area and the sustainable development of the national park region. Some of the national park's educational services are designed to cross provincial borders, others to be province-specific and to focus on specific areas. The educational work is holistic, imparts skills, is experience-oriented and specially tailored to the respective target group. National park rangers are preferred to deliver educational services.



Nature and environmental education, as well as high-quality visitor information, are particularly important in the Hohe Tauern National Park. The following objectives are pursued here:

- Communicating the global national park concept
- Consolidating the importance of the Hohe Tauern National Park as a protected area
- Imparting knowledge about ecological cycles and contexts
- Generate understanding about environmental protection and nature conservation as a social responsibility
- Motivating people to actively experience nature in an untouched natural landscape and semi-natural cultural landscape
- Guiding people towards environmentally compatible actions and behaviour

#### National park rangers

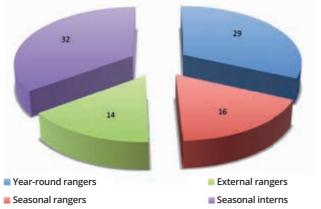
The national park rangers are the "calling card" of national parks worldwide and form the link between man and nature. As key ambassadors of the protected area, they share their knowledge as part of the extensive range of National Park education services and act as mediators between the worldwide national park idea and the possibility of individual experience. They inspire young and old on tours in the national park, deliver educational programs such as "Mobile Climate and Water School" or travelling exhibitions in schools in Carinthia, Salz-

burg and Tyrol and stage complex phenomena of nature in the educational facilities of the National Park.

#### Other activities in the job description for national park ranger:

Area supervision in the national park's valleys

- Obligation to monitor the infrastructure specific to the national park
- Educational and public relations work for visitors and the local population
- Lecturing and providing support to information stands
- Participation in wildlife management measures
- Cooperation in science and research projects in the national park, e.g. monitoring programmes, species protection programmes, etc.



## Training for "Certified Austrian National Park Ranger"

In 2018, 18 participants passed the final examination (written and oral) to become "Certified Austrian National Park Rangers". Among them were eight senior rangers. Here, people aged 50+ and over were asked to complete the training course. At peak times they support the National Park Rangers with their work in Tyrol.







We congratulate our 18 new rangers, eight of them senior rangers, on passing their final exam. (Picture 1: Salzburg, Picture 2: Carinthia, Picture 3: Tyrol)

In Salzburg, the rangers wear footwear from:



In Tyrol, the rangers wear footwear from:



Since 2010, national park rangers undergo an ISO-certified training programme that is standard throughout Austria. The "Certified Austrian National Park Ranger" course can be completed in two to three years. The foundation module comprises a total of 136 teaching units divided over 17 days, covering the fundamental contents from the national park concept, the national park networks, legal basis, all scientifically relevant subjects right up to communication, pedagogy and didactics, outdoor emergency management, orientation, cartography and meteorology. This foundation module always takes place in a different national park in Austria and brings all prospective rangers together. Only once this has been completed, will the contents of the respective protected area be taught in 120 additional teaching units (15 days) of the advanced module. The 80 teaching units (=10 days) of work experience in a national park administration team are intended for those who want to do the training without having a permanent job in a national park.

#### Visitor support facts and figures for 2018

Number of students assisted (incl. at events, such as partner school festival and camps)	41,305
Number of visitors assisted	49,378
(tour programmes, exhibition and national	
park centre tours, Meet a Ranger stations,	
lectures and events)	

Students visit the Hohe Tauern National Park as part of project weeks, climate or water school programmes or of the national park partner schools. Furthermore, the children and young people are addressed at the big school festivals, the junior ranger programme and the summer programmes (camps, weekly programmes etc.).

The largest percentage of visitors that we assist take part in our tour programmes or get advice from our Meet a Ranger stations. Furthermore, we offer guided tours through our national park centres or exhibitions with rangers or inform visitors to the national park at various events or lectures.

In 14 of a total of 24 visitor centres/exhibitions, visitors were systematically recorded. **418,021 visitors** made use of national park's indoor offers.

Hiking equipment provided by:



The Junior Ranger Programme of Salzburg is financially supported by:



Our programmes are provided with helmets and glasses by:



Klimaschule

Verbund

#### Swarovski Waterschool Austria

The Swarovski Waterschool, Austria is a mobile school offered to school classes from the national park provinces of Carinthia, Salzburg and Tyrol free of charge. Specially trained national park rangers visit schools for two to four days and will look into the secrets of water together with pupils aged between 9 and 14. Various experiments and group work are carried out in the classroom and outdoor water bodies close to schools and the animals and plants living in or around them are studied



Part of the curriculum at the Swarovski Waterschool Austria involves introducing young researchers to the tippy-tap from Uganda.

The aim is for the young researchers to get to know the element of water in different ways through interdisciplinary teaching and a variety of methods and actively contribute to the protection and sustainable use of the valuable resource of water.

The Swarovski Waterschool

was founded in the Hohe

Tauern National Park back in

2000. Since then, it has not

just been the content of the

project that has been subject

to continuous development:

The Swarovski Waterschool

is now available at seven

locations worldwide. In ad-

dition to Austria, water stu-

dents are trained in China,

India, Uganda, Brazil, the

USA and Thailand. Our inter-

national orientation contrib-

utes to our understanding of

how water links us across the

**SWAROVSKI** WATERSCHOOL

poor hygienic standards, flooding etc.) and possible solutions can be dealt with. The interaction between attendees of the water school from the individual locations is very important too. This is possible, for example, via the project website www.swarovskiwaterschool.com completed in 2018, and is not dependent on the respective language.

#### Waterschool documentary film

Its international focus makes the Swarovski Waterschool unique. In order to underline this, students of the UCLA School of Theater, Film and Television in Los Angeles were commissioned to shoot a documentary about the water school. To this end, each participating location - Austria in Kals - was filmed and a water school attendee was portrayed in more

The resulting and very inspiring documentary "Waterschool" shows both the individual water situation and the globally different course of the water school and the impact of this international educational project. The film was

Oscars, the Davos Business Forum, the Cannes Film Festival and the Salzburg Festival to selected audiences. And since late July 2018, "Waterschool" can be viewed via the streaming provider "Netflix".

screened in 2018 at fringe events to the



On up to four school days, the topic of "climate" is dealt with in a very comprehensive, practical manner and on the basis of numerous experiments. For example, it is discussed what the term "climate" actually means and how it is measured, whereby the pupils can test all weather measuring instruments themselves. We also discuss which factors influence our climate and use experiments to simulate ocean or wind currents or generate CO, ourselves. In order to better understand the consequences of climate change in the Alps, the first step is to teach about the sophisticated climate adaptation strategies of the flora and fauna in high mountains. Outdoor excursions are also offered for this purpose. The rise in temperature in the Alps becomes immediately visible to young climate researchers, especially when hiking to the glaciers. The topic of climate protection is the focus of the climate school. Traffic censuses, controls on the origin of foodstuffs or the determination of your personal ecological footprint contribute to the understanding that you as an individual can contribute to climate protection in your everyday decisions.

project: The website http://klima.schule lets pupils playfully

work through the contents of the climate school using modules. Teachers also have the opportu-

nity to set up their own group for themselves and their school class; to select specific modules which the pupils are to work on, for example as a homework exercise, and to check who has successfully mastered how much of the task. Via http:// klima.schule, it has been possible to make the contents of the VERBUND Klimaschule (climate school) of the Hohe Tauern National Park available free of charge to all climate-interested people in the German-speaking world.





The climate school's online challenge is a fun way for you to test your climate knowledge

Since its establishment in June 2010, 22,780 students have already taken part in climate school lessons until the end of the 2017/18 school year. Also, a two-day climate school festival was held at the end of June 2018 with a total of 1,700 pupils in Niedernsill, at which the children completed a wide variety of environmental stations.

WATERSCHOOL

The documentary "Waterschool" shows impressions from the various water school countries.

globe. Using a very hands-on approach, different challenges relating to the subject of water (water pollution, water scarcity,

More than 3,200 children attended the Austrian Waterschool in 2018.



VERBUND climate school of

The consequences of climate change are already clearly evi-

dent, especially in the mountains. Glacier retreat and thawing

permafrost are challenges and reality – as well as the fact that

With the conviction that it is possible to protect the climate -

every day in everyday decisions – national park rangers have

been visiting school classes throughout Carinthia, Salzburg

and Tyrol since 2010 as part of the mobile climate school.

Thanks to VERBUND's sponsorship, lessons in these national

park federal provinces can be offered free of charge.

mankind is contributing to this climate change.

the Hohe Tauern National Park

excursion to a glacier in the Hohe Tauern National Park

New learning platform

In 2018, a new learning platform was developed as part of the

## Partner schools

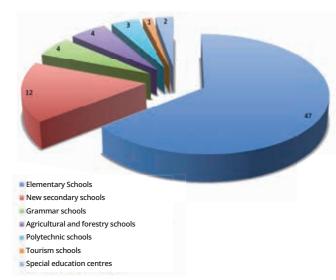


15 years ago the "National Park Partner Schools Pilot Project" started with one school. Today 73 schools within the national park region of Carinthia, Salzburg and Tyrol are already contractually designated partner schools with a total of about 8,000 pupils (school year 2017/2018) from elementary schools, new junior schools, grammar schools, special educational centres, agricultural and forestry schools, polytechnic schools and tourism schools.

The long-term partnership between the schools in the region and the Hohe Tauern National Park is based on the belief that a sustainable and effective education in environmental protection and nature conservation as well as embedding the national park idea in childhood and adolescence are necessary. Children and the youth of today are the decision-makers of tomorrow and will be involved in the decisions on the direction and content of the Hohe Tauern National Park in the municipalities, tourism associations, committees and associations in years to come.

Sponsorship partner of the partner school program has been "Ja!Natürlich", the largest brand of natural products in Austria, with support including healthy snacks for meetings.

#### School types (a total of 73 schools):



#### Open Day

The St. Margarethen elementary school (Carinthia) and the Hohe Tauern National Park have been cultivating an intensive partnership for several years now. The reason for the intensive cooperation is to firmly embed the national park idea in the minds of young people. Among other things, the organisers of the Open Day in January showed a mobile touring exhibition of the Hohe Tauern National Park and provided information about recycling management. This was then followed by a tasting in the sports hall. The school choir with instrumental music, the mixed choir St. Margarethen and the "village musicians" brought the day to a festive close.

**PARTNERSCHULEN** 

## Closing festivities of the national park elementary schools in Mallnitz

Four years long, the pupils were regularly taught by our national park rangers and went on excursions into nature. In order to review the shared experiences once again, a big closing party for the of the year 5 of the Carinthian partner schools was held in June at the visitor centre in Mallnitz.

Different stations let you learn interesting facts about wild animals, test your sense of taste and experiment with water. At the end, certificates were issued for the successful participation in the national park course.

#### Extension of national park partner school project

"Contracts" are concluded with the individual schools, in which mutual goals and contents are defined via a partnership. The successful partner school project between the Hohe Tauern National Park in Carinthia and the schools in the national park municipalities was extended in November and will run for another four years. This specifically relates to an agreement with the elementary schools in Heiligenblut, Grosskirchheim, Mörtschach, Obervellach, Mallnitz, Malta and Winklern as well as the Winklern secondary school.



With the "So schmeckt die Natur" (This is what nature tastes like) programme module, pupils are introduced to organic food from their region and taught about healthy, sustainable nutrition.

#### Joint partner school festival

The fact that learning and having fun in environmental education are not mutually exclusive was once again demonstrated by the large partner school festival in Niedernsill in June. With considerable support from the municipality of Niedernsill, it was once again possible for the team of the national park administration from Salzburg to transform the recreational area around the bathing lake into an enormous "classroom" with exciting knowledge, movement and experience stations. In 2018, we integrated the cross-province project of the climate school into the partner school festival. On both days, we looked after a total of 96 school classes with 1,700 pupils, 430 of them from partner schools in the national park administrations in Carinthia and Tyrol. Our colleagues from Carinthia and Tyrol provided us with active support!

#### The national park comes to town

In June, the Hohe Tauern National Park played host again at the Hellbrunn Palace Park to celebrate together with the students of the city of Salzburg and surrounding area and share more information about the national park. Collaborating with the palace and park management teams at Hellbrunn, it was possible to ensure that an exciting morning with an estimated 900 children and 100 teachers ran smoothly.

## Thumersbach elementary school – new national park partner school

The partner school programme of the Hohe Tauern Salzburg National Park has gained another school since the beginning of the 2018/2019 school year: Thumersbach elementary school is the 44th partner school of the national park in Salzburg. Meanwhile, almost all compulsory schools in the National Park region from Krimml to Muhr are contractually designated partner schools. The total of 44 partner schools with around 5,000 pupils include elementary schools, new secondary schools, special education centres, grammar schools, agricultural and forestry schools, polytechnic schools and tourism schools.



#### New national park secondary school in Defereggental

At the start of the 2018/2019 school year, the new secondary school in Defereggental became a new national park partner school, one of a total of 19 partner schools in the Tyrol part of the Hohe Tauern National Park. A change in the school district boundaries made this possible: Since 1 September 2018, the children of the Hopfgarten Primary School in Defereggen have been attending the New St. Jakob Secondary School after year 5, which is now called the "New National Park Secondary School Defereggental" thanks to the amalgamation of the three Defereggen municipalities.

More than 2,300 pupils in 119 classes enjoy regular "national park lessons" in Tyrol and thus get to know the nature of their homeland better.



With empathy, knowledge, passion, commitment, but also fun, our national park rangers have been imparting national park knowledge to school pupils for years.

#### **Camps**



Even teenagers can also be inspired by nature. Away from civilisation, mobile phones and social media are just a trivial matter.

## 28 junior rangers spend two exciting weeks in the mountains

The teenagers spent two weeks in the Hohe Tauern National Park and were taught the skills that real national park rangers need for their work. They learned a lot about animals, plants, geology, glaciers and life in the great outdoors. However, the training programme also offered action, fun and adventure for the dedicated young people.

Kärntnermilch, the company financially supporting the Carinthian junior rangers feels that it is vitally important to promote awareness of the sensitive inter-relationships in nature. In Tyrol, the project is financed entirely by the national park.

#### "Youth at the TOP" - ALPARC

The fourth editions of the Youth at the TOP project on 12 and 13 July 2018 saw more than 450 young people from 43 different destinations in the Alps and the Carpathian Mountains come together.

2018 was dominated by the impact of climate change on mountain ecosystems. Some youth groups were able to approach the phenomenon of climate change by crossing glaciers and snowfields, others by observing the Alpine flora.

In Tyrol, this was developed using the example of Innergschlöss and the Innergschlöss educational glacier trail as well as at the head of the Schlatenkees glacier. In Carinthia, the young people hiked from Kölnbreinsperre via Kleinelendtal to Osnabrücknerhütte and were thus able to expand their knowledge of climate change and its effects on flora and fauna.

#### Wilderness camps

During two camps in July and August, the itinerary included forays into the high mountains, wildlife watching, setting up a campsite and spending the night outdoors. The base camp was at Hofrat-Keller-Hütte in Obersulzbachtal, which offers no luxuries: no electricity, no hot water and no radio signal. The children have to look after themselves as a team and thus acquire sustainable knowledge.

#### House of Water:

#### ÖAV camp "On nature's trail"

Looking closely and listening, playing and having fun – 11 children discovered the House of Water, Schwarzach and Staller Sattel for their journeys of discovery in August. Rafting on the Isel river was refreshing and exciting. A special summer camp for 10 to 12-year-olds in East Tyrol.



#### WasserCamp2018

The popular WasserCamp was once again an experience for 21 children of Swarovski employees. The national park rangers guided the children through the exciting Swarovski Waterschool programme, with the subjects of ponds and campfires playing a significant role too. Adventures were to be had on the via ferrata and the summer toboggan run. A visit to the Wilhelm-Swarovski Observatory and the Grossglockner High Alpine Road rounded off the successful educational camp.

#### Other activities:

- National park detectives
- Young researcher club
- Summer internships

#### **National Park Academy**

Since 1997, the Hohe Tauern National Park Academy has been the joint adult education institution of the national park provinces of Carinthia, Salzburg and Tyrol. Conferences, courses, seminars and workshops on nature and national park-related topics are an enrichment for experts as well as for anyone interested in nature and are the tipping point for inspiration and further education.



Herbal seminars are also very popular with local people.

In addition to traditional features in the programme such as the botanical days in the high mountain, an annual wildlife management conference and various herbal seminars, there has also been an increase in training and advanced training in wilderness education since 2016. The events are held in the academy's own buildings such as the Mallnitz visitor centre, Hofrat-Keller-Hütte and the House of Water that are also involved in the conceptual and organisational aspects of the academy's programme.

As a training centre for "Certified Austrian National Park Rangers", the academy offers seminars that can be counted as part of apprenticeship studies. As well as a basic module that takes place every few years, regular in-depth further training courses are offered with trained experts who prepare rangers for their future field of work.

Subject	Location	Participants
CONFERENCES		
9th Agriculture Conference – Using & protecting Alpine pastures	Mallnitz	45
22nd Wildlife Management Conference – Poachers, pretty hornsand antlers	St. Jakob i. Defereggen	45
SEMINARS		
Time out(doors) with young people – Excursion didactics and planning of outdoor teaching	Matrei i. Osttirol	16
Bird identification for beginners	Mallnitz	24
Species protection for old pet breeds – The "dark bee"	Bruck a. d. Glocknerstrasse	22
Changing landscapes	Mallnitz	33
Fit for the high mountains – Advanced botany & zoology	Mallnitz	29
Botanical High Mountain Days 2018	Kals a. Grossglockner	26
Wild fruits – Healthy & tasty during autumn	Virgen	24
Courage to take risks – How to weigh up risk	Neukirchen a . Grossvenediger	24
The geology of the Hohe Tauern & petrology and mineralogy	Mittersill	32
11 EVENTS IN TOTAL		320

#### Web info:

#### www.hohetauern.at/bildung



Geological seminars have become increasingly popular in recent years. The Hohe Tauern National Park is home to the Tauern Window and is, therefore, the ideal place for practical learning.

#### **Educational centres**

Besides natural resource management and science & research, environmental education is one of the core tasks of every internationally recognised national park. In order to be able to describe, understand and explain nature, pupils learn at the different educational centres of the national park with this paired with experiences and adventures.

Whether in the House of Water in St. Jakob, in the Mallnitz visitor centre, in the National Park Worlds or in the Science Centre in Mittersill or in the National Park Workshop in Hollersbach with its herb garden and "ecological footprint", it is possible to explore the nature of the national park anywhere as well as look into current environmental issues such as the global biological water balance or climate change.



#### rangerlabs

The researcher workshops in the new rangerlabs at the visitor centre in Mallnitz are held true to the motto "learning from nature" because nature has inspired us humans since the dawn of time. A biological phenomenon is carefully examined under guidance from a ranger. Participants will be allowed to become actively involved themselves, contribute their own ideas and experiment independently. The highlight at the "rangerlabs": what you have learned in the laboratory is linked directly to an outdoor excursion in the national park. Here, a participant's rucksack is filled with experiences and ideas and it quickly becomes clear that the Hohe Tauern still have many secrets to reveal

Specifically, the rangerlabs offer three different programmes on the topics of "Valuable water", "Specifically climate" and "Inspiration that is nature".



"Specifically climate": What is climate and how are the seasons created? Why is the forest a protector of climate? How do landslides, mudflows or rockfalls occur and what does this have to do with climate change? Models and experimental stations take you into a world of exciting conundrums about weather and climate.



The Science Centre has eight modules offering practical application opportunities for young researchers.

#### Science Centre

The Science Centre focuses on the natural history of the Hohe Tauern National Park. Eight interactive, professionally accompanied indoor modules present the topics of geology and mountain formation, mineralogy, climate and weather, water and snow, ecology in the high mountains, altitudinal belts and vegetation zones, micro-world as well as the voices and sounds of the nature in such a way that allow for complicated processes and contexts to be shown but can be explored independently with the help of attractive teaching and learning materials, modern binoculars and original exhibits. In 2018, 430 pupils visited the Science Centre.

#### **National Park Workshop**

The National Park Workshop focuses on the cultural land-scape of the Hohe Tauern National Park. Four interactive, professionally accompanied indoor modules are dedicated to the topics of Alpine pasture management, edible and healing products from nature, trees and forests as well as animal tracks. By getting to know and trying out time-honoured farming techniques, traditional knowledge of the healing powers of local nature and the ecology of the forest cultural area, which has been used for centuries, visitors will be able to experience how closely interlocked nature and culture are in the Hohe Tauern National Park and reflect on the consequences of human intervention in nature. In addition, an extensive herb garden and the "Ecological footprint" walk are available in the adjacent outdoor area.

#### **House of Water**

In the national park municipality of St. Jakob in Defereggen, children, young people and adults can improve their knowledge of water and climate. Our specially trained national park rangers prepare the lessons directly in nature in an exciting way and ensure lasting insights.

The environmental education centre at 1,440 metres above sea level offers year-round project days for school classes and seminars for adults. In summer, the House of Water team organises children's camps and activities for families. The biggest classroom of all is nature itself!

The Tyrol environmental education centre and the meeting point for researching youth: that is the House of Water has meant in the meantime for an estimated 22,000 visitors. The



The cultural landscape is the focal point of the National Park Workshop.

15th anniversary of the house was celebrated in September with a well-attended open day. Educational programmes in 2018 ranged from the 42 water projects for children and young people to the 4 creative workshops and 12 guided tours for adults.

Furthermore, classes from the East Tyrolean National Park partner schools came in large numbers to the water school program to get to know about how valuable nature is. The redesigned large panels about the international Swarovski Waterschool in the outdoor area on the path between the two hotels Lärchenhof and Zirbenhof garnered much attention.



Experiment and research rooms in the House of Water provide children with an optimal learning environment and experience.

## Visitor centres & infrastructure

24 visitor centres in the national park communities provide visitors to the national park with an initial introduction to the Hohe Tauern High Mountain National Park. The most modern and exciting exhibitions, which are often supplemented annually by special exhibitions, guide visitors through various "National park worlds" from the small to the big.

In addition to the centres, themed trails lead to many national park valleys, which provide interesting information about the national park as well as the special features of each valley. National park information points and car parks at the starting points of many frequented hiking destinations make the ideal starting point for national park visitors. This broad range enables measures to steer visitors and enhances the region's tourist infrastructure.



Themed trails in many national park valleys provide visitors with valuable information.

#### National park centres/exhibitions:

- Mallnitz visitor centre
- Winklern national park information
- Oberstbergmeisteramt, Obervellach
- Swarovski observatory, Kaiser-Franz-Josefs-Höhe
- National park exhibition, Kaiser-Franz-Josefs-Höhe
- Holler im Klausnerhaus, Hollersbach
- Tauern routes, Mittersill
- Ecological footprint, Hollersbach
- Resterhöhe national park panorama, Hollersbach
- Glaciers-climate-weather, Uttendorf
- Mittersill National Park Centre
- Emeralds & crystals, Bramberg
- Life under water, Fusch
- (M)Ursprung, Muhr i. Lungau
- Lords of the skies, Rauris
- National park gallery, KaprunOn Alpine pastures Between heaven and earth,
- On Alphie pastures Between heaven and earth,

  Hüttschlag
- A look in the Tauern Window, Neukirchen am Grossvenediger
- $-\hspace{0.1cm}$  Stone pine exhibition, St. Jakob im Defereggen
- National park welcome area, Tourismushaus Lienz
- Beyond time, Virgen
- Grossglockner panorama, Kals am Grossglockner
- National Park House Matrei i. O.
- Glocknerwinkel, Kals am Grossglockner

#### Mallnitz visitor centre

In April 2018, the Mallnitz visitor centre was re-opened with a completely revised concept. The new exhibitions were designed by the consortium E.C.O., Wolf Schröder and Verdandi, who emerged as winners of a competition.



The newly designed exhibition "univerzoom nationalpark" takes the curious of all ages into the Hohe Tauern world of wonder.

The renovations of the Mallnitz visitor centre is part of an overall infrastructure concept by the Carinthian National Park Fund 2016–2020. The costs for the renovations totalled approx. € 550,000. Most of the funding comes from the EU programme "Rural Development 2014–2020".

#### The new exhibition "univerzoom nationalpark"

The completely redesigned exhibition "univerzoom national-park" introduces visitors to the secrets of nature in the national park. Whether animated landslides, mysterious wilderness or species-rich wildlife – the wonderful world of the Hohe Tauern is revealed to the curious of all ages at numerous adventure stations. The perfect introduction to everything that visitors may encounter in the wild.

#### "rangerlabs"

Following the motto "Learning from nature", the "rangerlabs" closely examine the subjects of "Precious water", "Specifically climate" and "Inspiration that is nature".

#### National park info points

The updating and further development of the existing network of information facilities in the national park municipalities and at the starting points for hikes to the national park in the Carinthian part of the Hohe Tauern National Park has been completed.

The revision of a total of seven info points at central locations in the national park municipalities and a total of 38 info points at the starting points for hikes in the national park was completed during the 2018 season.



Info point at Glocknerblick in the national park municipality of Grosskirchheim.

#### Launch of the "Welcome Centre - House of the Ibex"

Project partners for the "Welcome Centre – House of the Ibex" are the municipality of Heiligenblut am Grossglockner, the Heiligenblut tourist board, the Carinthian National Park Fund and the association of the Friends of the Hohe Tauern National Park.

The main attraction, apart from the modern presentation of information in the foyer, is an interactive exhibition about the national park focussing on "lbex".

The aim is to offer visitors a state-of-the-art information and service facility with a national park shop and restaurant (one-stop shop).

The opening of the building is planned for early summer 2020.



Randering "Welcome Centre - House of the Ibex", architect Ronacher.

#### M(URSPRUNG) – The flow of nature

The new exhibition "(M)ursprung – the flow of nature" was officially opened in the national park municipality of Muhr im Lungau. The exhibition has daringly established a bridge between two worlds – from the untouched core zone of the national park to the development zone of the UNESCO Salzburger Lungau Biosphere Reserve.

Rising powerfully from its source in the eastern Tauern Mountains, the Mur is Austria's second longest river. Many spe-

cial features surround the source of the Mur. A unique high mountain reserve created over millions of years and rich in animate and inanimate variety meets here with old farmland that has been used for millennia by people and thereby created rarities. Only upon closer inspection do the underlying natural and cultural processes become visible in their relevance to current and future developments.

The nature conservation ideas of a national park management team and the strategies for the sustainable use of the biosphere region engage in an exemplary way and allow both untouched as well as controlled processes.



(M)Ursprung connects the Hohe Tauern National Park and the Lungau Biosphere Park.

## Into the eternal ice on new paths – Innergschlöss glacier trail

In August, it will be exactly 40 years ago that it was constructed by the Österreichischer Alpenverein in the Hohe Tauern National Park – the Innergschlöss glacier trail. However, the stark retreat of the glacier required the trail to be rerouted – this, in turn, has led to the guide book for the trail "Naturkundliche Führer Gletscherweg Innergschlöss" (only available in German) to be fully revised.



Anna Brugger, ÖAV; author Hannes Schlosser; Liliana Deagostin, ÖAV and Florian Jurgeit, national park presenting the new guide book.

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## Alpine partnership for the national park region

The Hohe Tauern and thus the Hohe Tauern National Park have a long history of Alpine tourism away from the early crossings made for business purposes (mule tracks, cattle drives) – not least because of the famous peaks such as the Grossglockner and the Grossvenediger. The 1860s saw the beginning of the first predominantly Alpine tourist ascents - and thus a close association with the Alpine clubs. Names such as Friedrich Simony (see first tourism description of the Felbertauern in the yearbook of the Österreichischer Alpenverein from 1865) or Johann Stüdl (Prague section) and their "traces" are witnesses of this close connection. Even during the eventful history and founding phase of the Hohe Tauern National Park, a period of sometimes fierce conflict, the Alpine associations were not only important NGOs but also landowners representing the national park concept and the current nature zone of the protected area.

The member of Salzburg Provincial Parliament August Prinzinger and the Carinthian forest industrialist Albert Wirth are closely connected with the history of the Hohe Tauern National Park. Both men lived for the idea of a national park and wanted to preserve the mountainous landscape between the Grossglockner and Grossvenediger for generations to come.

In 1913, Prinzinger convinced the association for national parks *Verein Naturschutzpark* to purchase an estimated 1,100 hectares of land in Amertal and Stubachtal for the purpose of creating a protected area.

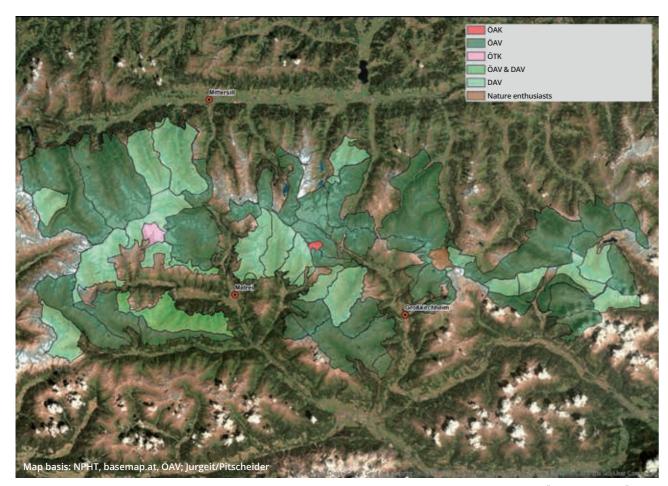
#### For the 100<sup>th</sup> anniversary Commemorating a pioneer

100 years ago, the Aicher von Aichenegg sisters sold the Pasterze glacier and its surrounding steep flanks including the Grossglockner to the Österreichischer Alpenverein. The forest industrialist Albert donated the money for the purchase,

thus laying the foundation for the establishment of a national park. It is thanks to his far-sightedness that this impressive region has been preserved and spared from further development plans. Wirth and the Österreichischer Alpenverein have since been inseparably linked to the history of the Hohe Tauern National Park.



lbert Wirth



The map shows the wide range of responsibilities for Alpine Club sections in the Hohe Tauern National Park. Apart from the ÖAV and DAV, the ÖTK, the Austrian Alpine Club and nature enthusiasts also form part of the Alpine infrastructure. Coordination measures such as the Huts-Trails conference, for example, create an intensive cooperation between all participants and ultimately ensure a high-class national park experience.













Path maintenance work is one of the most important infrastructural measures in the national park. Over 4,000 km of hiking trails need to be maintained in the national park area alone.

#### National park experience – Thanks to huts and trails

At present, the Alpine Clubs ÖAV (Österreichischer Alpenverein), DAV (German Alpine Club), ÖTK (Austrian tourist club), ÖAK (Austrian Alpine Club) and nature enthusiasts in the Hohe Tauern National Park with their huts and the Alpine network of trails in their working areas make a valuable contribution to the experience visitors to the national park have in nature – and from the perspective of the protected area for visitor guidance. Through joint initiatives and support up to coordination gatherings such as the huts–trails conference, an active cooperation between Alpine associations (and the relevant sections) and the national park administrations endeavours to maintain the high quality of the Alpine infrastructure.

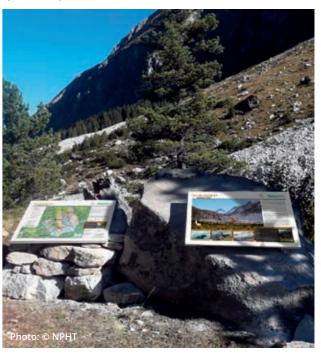
## Projects with added value for the national park region

The ÖAV and the Hohe Tauern National Park have been linked since 1982 by the "Sponsorship of the Hohe Tauern National Park", through which numerous projects have been realised in close cooperation. Thus, payments that the ÖAV receives for



The restoration of the hut Alter Progerhütte in line with historical plans will be completed by summer 2019.

its land from the contractual nature conservation flow back into activities in the protected area through the ÖAV sponsorship fund. Various projects from the fields of infrastructure, education and science have been and continue to be made possible in this way. Recent projects supported by the ÖAV sponsorship fund – such as the restoration of the hut Alter



Info points in the wilderness area.

Pragerhütte together with the DAV, the Innergschlöss glacier trail with the new edition of the guidebook "Naturkundlicher Führer" 2018, the glacier database www.gletscherwandel.net with all measurements of the "ÖAV glacier servants`", hut information boards or scientific work enable a living Hohe Tauern National Park region with added value. Other joint projects include the monitoring of the "Red-spotted bluethroat", permafrost monitoring and the further development of the mobility programme in the Carinthia national park region.

According to the special protection area ordinance in place for the wilderness area of the Sulzbach valleys, conventional forms of mountaineering, hiking, touring skiing and the like are still permitted. With the help of the sponsorship fund, info points are being set up to share knowledge, boost understanding and raise awareness for the protection and preservation of this unique wilderness area with its untouched nature, wildlife and protected species and habitats, as well as its natural features. These are planned to be installed at the access points at huts Kürsinger Hütte, Warnsdorfer Hütte, Hofrat Keller Hütte and Aschamalm in Untersulzbachtal.

#### **Public relations**

The initiatives of the national park for nature conservation in the areas of natural resource management, science & research as well as education and visitor information are made known to a broad mass but also to specific target groups using various public relations instruments.

Broad media such as the Hohe Tauern National Park home-page, the national park magazine, the social media channels and press trips with international journalists form the basis of the public relations work. Inquiries from print and AV media are supported in the best possible way and the expertise of the national park and its employees results in many valuable TV, radio and social media contributions. In addition, regular press releases on current topics, invitations to appointments and events and the cultivation of existing contacts strengthen the media presence of the Hohe Tauern National Park, especially in local media.

#### **CD** manual

The agency vorauerfriends was entrusted with the redesign of the CD line as part of an ideas competition. The implementation of the new, modern yet time-



less design line was carried out in close cooperation with the national park on the basis of precise work. The work was completed in September.

A handbook sets out the rules and illustrates the implementa-

tion guidelines by means of various publications. The manual and print templates can be obtained and implemented online by the company's own employees, as well as by commissioned agencies and print shops.

#### New website on the internet: www.hohetauern.at

Homepage visitors in 2018:	137,856
Page views:	347,096
Avg. visitors/day:	378
Avg. length of stay:	2.55 min.

The homepage of the Hohe Tauern National Park was completely revamped and designed in the style of the new visual appearance of the protected area. With a new design, new menu navigation and further technical development in terms of user-friendliness, browser compatibility and loading speed, the re-launched website was oriented primarily towards the trends of the latest web design and user behaviour on the market. The site has now been technically optimised and is visually appealing, particularly on smartphone and tablet screens. After all, an average of 80% of internet users is on the move with their mobile phones when using the internet. The development and expansion of the online presence is a particular priority for the Hohe Tauern National Park, which is convinced that it will make the Hohe Tauern National Park, its values and ideas as well as its diverse knowledge accessible to a broad-ranging public.



The new homepage is designed to reflect user behaviour and the latest trends in web design

#### Social media

#### Strategy

The increasing importance of these channels and the excellent access figures and fan statistics prompted the national park to develop a well-founded social media strategy, which was adopted at the 82nd board meeting. The introduction of content with added value, especially by employees, forms the cornerstone of the information. Quarterly reports and a workshop in October were used to check whether the strategy was up to date and to supplement it.

As well as high-quality and continuous content, it is increasingly important to push channels with financial marketing measures, as the algorithms of social media providers severely restrict the distribution of content.

#### Facebook



In 2018 1,241 fans could be won. The lower increase compared to previous years is due to the provider's restriction on the distribution of deliveries. Since the launch of our FB fan channel we have not focussed on boosting fan numbers at any cost, but want to address our existing fans in particular with high-quality content. The interaction rates are still high, but in the future, it will be necessary to use financial means so that our information actually reaches our existing customers.

Facebook as at 31/12/2018:	34,531 (+1,241)
average reach/post:	5,800
Avg. interaction rate:	118 (comments, likes, shares)
Post with most reach:	55,400 (film: 100 years of the Albert Wirth donation)

#### Instagram

The goal for 2018 was to strengthen our Instagram channel as a second main pillar within the framework of our social media strategy. This is an increase of 2,324 (+ 580%!) The number of followers has increased beyond our expectations. On Instagram, the share of the under 35-year-olds dominates – unsur-







prisingly. In terms of the gender ratio, the channel presents itself mostly balanced, with a slight current overhang of female followers (52.43 %). The share of users from Austria continues to dominate (46.72 % of fans), but the number of followers from Germany has increased significantly (21.9 %). The USA (5.93 %), the Netherlands (4.44 %) and Italy follow in subsequent places. In contrast to Facebook, Instagram focuses primarily on visual language and moving images. The challenge will be to continue to provide up-to-date, high-quality images and, above all, short films for the channels in future.

"Own" hashtags	43,971 posts
(#hohetauern, #nationalpark-	(+ 17,884)
hohetauern etc.):	
Instagram account:	3,000 followers

#### YouTube

Footage of the national park is made available via the You-Tube channel. This area with its 406 subscribers is particularly popular with young people and can be further expanded. A concept and implementation possibilities are to be worked on for 2019. So far the films we have provided have been viewed 61,300 times.

Views in 2018:	61,300 views / lifetime (+ 8,500)
Subscribers:	406

#### Other activities:

- 2 x year, national park magazine (circulation per issue approx. 750,000 units)
- National park children's magazine
- Various TV productions: including ORF III Natur schafft Wissen; a short documentary about Albert Wirth anniversary
- 5 general newsletters to 2,200 subscribers
- 3 birds of prey newsletters to 1,200 subscribers
- Collaboration, project implementation, Public Relations, Nationalparks Austria
- 5 x national press releases via APA
- 80 national, local and regional press releases
- 3 press conferences
- 7 technical reports for the Milka blog
- Annual programmes National park ranger services
- GDPR implementation/adaptation

#### **Tourism**

# Photo: © NPHT / M. Luggar

Programme features such as "Rent a ranger" and wildlife watching events are just some of the highlights of the Hohe Tauern National Park.

The Hohe Tauern National Park as a protected area not only fulfils the task of protecting ecosystems entrusted to it and preserving them for future generations, but also that of making the largest national park in Austria a tangible experience for visitors and acting as a catalyst for the sustainable development of the national park regions in cooperation with tourism.

The Hohe Tauern National Park, with its comprehensive national park infrastructure and specific ranger programmes, is an attractive prospect for visitors and holiday guests with an affinity to nature and national parks. As part of the overall tourist range of services, the national park makes a significant contribution to the tourism programme and the development of the tourism regions. Year-round tour programmes, advice at ranger info points and the national park visitor centres are popular and very well booked services.

Cooperative partnerships between the national park and tourism organisations, as well as in marketing and sales, generate benefits for the entire tourism region and aid the further development of the regions. For the tourism industry and the local population alike to benefit more from the status of the national park as a protected area, a collective identity as a national park region with tourism (regional and supra-regional) must continue to be pushed and promoted. It is against this backdrop that the Hohe Tauern National Park also welcomes the boost in the presence of the national park idea with its values and special features and the increased positioning of the tourism regions with the theme of the national park as a unique selling point.

#### Carinthia

#### **HOHE TAUERN 2020 NEU mobility concept**

The Hohe Tauern National Park Carinthia has been a member of the cooperation "Fahrtziel Natur", a cooperation dating back to 2011 and whose operators include Deutsche Bahn. A new mobility concept HOHE TAUERN 2020 was developed together with the Mölltal municipalities. New bus lines will seamlessly boost the services of the ÖBB Railjet stop in Mallnitz with its trains every 2 hours. Nature tourism becomes comfortable and environmentally friendly for all national park guests from Mallnitz to Heiligenblut without having to change trains. Other bus trips from Heiligenblut to Kaiser-Franz-Josefs-Höhe or the free guest hiking bus to the valleys and gorges in the Ankogel-Mallnitz-Obervellach-Flattach region are just some of the public transport highlights.

#### Magical moments

Collaborations with 11 Carinthian protected areas, tourism regions and the Carinthian advertising agency have led to the development of unique programmes in Carinthia under the ARGE NATURERLEBNIS banner of "Magical moments". The national park is a partner of this cooperation with its ranger programmes.

#### Visitor support

In cooperation with Großglockner Hochalpenstraßen AG, it was possible to offer daily guided tours of Gamsgrubenweg to visitors of the Grossglockner High Alpine Road from July to September.



National park ranger out and about in Seebachtal to share information with fans of nature.

## Cooperation between National Park Kärnten Card companies

Guests who were accommodated in National Park Kärnten Card partner companies were able to benefit from the rangerlab programmes in the Mallnitz visitor centre as well as the weekly adventure tours of the national park free of charge.

#### Salzburg

#### 2018 summer campaign

A collaboration between the tourism associations and Salzburger Land Tourismus (SLT) launched a campaign in the German-Austrian area. The main objective was to promote the summer season and bolster demand. The marketing campaigns were split equally into radio, print and online marketing. (Krone insert in East Austria – circulation 407,000 units; radio stations Radio Arabella, Ö3 and Antenne Bayern; content production with national park rangers (newsletters, bloggers, influencers etc.))

#### Nationalpark Sommercard

The Nationalpark Sommercard is an all-inclusive card for holidaying in the Hohe Tauern National Park holiday region. Holidaymakers can enjoy free admission to and use of more than 60 attractions such as numerous mountain railways, public transport, national park exhibitions and natural spectacles. The card was issued in 2018 to 58,000 adults and 9,184 children.



#### Asia 2020+

The rapid rise of Asian countries and the resulting travel boom prompted the Hohe Tauern National Park holiday region, together with other partner regions, to increase advertising in these markets. Along with blogger/vlogger trips to the national park region, various trade fairs were also visited in Singapore and Shanghai.



Blogger trips to the national park are becoming increasingly popular.

#### **Tyrol**

Tourism projects were implemented in collaboration with TVB Osttirol (East Tyrol tourist association) in addition to infrastructure and visitor guidance measures:

#### · Campaigns (excerpt):

Tyrol advertising – AUT Out of Home; Austria advertising – GER & Belgium; Ö. Wanderdörfer – Var. hiking product campaigns, online campaigns

#### • Press events in 2018 (excerpt):

ITB Berlin; Netherlands & Belgium; Munich (winter/spring & autumn); editorial tour Hamburg & Frankfurt; numerous individual and group press trips conducted and 101 journalists from GER, AUT, BEL, NL, CZE, SLO and HRV were looked after by the East Tyrolean ranger team.

- Trade show presence (rangers in attendance):
   Vienna holiday trade show, FREE Munich, Urlaub & Camping Wels
- Excerpt from TV and radio productions:
   Radio: Ö1, Bayrischer Rundfunk, Radio Berlin
   TV: ZDF East Tyrol winter report, Hessischer Rundfunk summer & winter, ORF



Filming the ZDF report in East Tyrol here at Nature Watch recordings in Kals am Grossglockner.

#### National park as a stage & provider of services

As part of the "Experience the national park" project, a plan of measures for 2018–2020 was presented to tourism service providers at the first National Park Tourism Day. Under the title "The power of the national park is an opportunity for East Tyrol – let's use our potential", the potential use of the national park in the East Tyrol region was critically scrutinised. Projects such as the "The Hohe Tauern National Park – the sound of the mountains of East Tyrol" performance project, "Hohe Tauern National Park regional products" and employee experience training courses were presented and successfully launched in 2018. The national park is to be brought to life in East Tyrol and on the markets using emotional messages.

## 25 years of the Association of the Friends of the Hohe Tauern National Park



Klaus J. Jakobs, 1936–2008, Founding and Honorary President

"The Hohe Tauern National Park is Austria's initiative to protect and cultivate the nature and culture of a unique region through the interaction of man and ecology, in order to develop it as a model for the intelligent management of the heritage for mankind."

25 years ago, the great European entrepreneur Klaus J. Jacobs took up the idea of placing the unique natural and cultural landscape of the Hohe Tauern under protection on a civil society basis. Klaus J. Jacobs was considerably ahead of his time with his idea to bundle individual members and business enterprises in an association and to co-operate with those responsible for the national park, politics and NGOs for the benefit of the national park. Following his example, numerous people and well-known companies have become real "Friends of the national park" in the past 25 years. With their support, it has been possible to implement projects with a sustainable impact. Some of them now with a global reach. It was always a particular concern of the people in charge of the association to generate enthusiasm in young people for nature and the national park idea. The young people of today are the adults of tomorrow. They will have to make decisions that will significantly influence our future life.

Over the past 25 years, the association has raised more than twelve million euros in private funds. The Friends have always

been more than just financial supporters for the Hohe Tauern National Park. They have become an essential part of the national park family and ambassadors of the protected area all over the world.

#### Presidents

1993-1995: JACOBS Klaus J., Founding President 1995–1998: FEHLE Armin, Honorary President 1998-2001: LANGES-SWAROVSKI Gernot

2001-2007: SCHALLE Veit 2007-2013: WUTSCHER Werner

2013-2018: STOSS Karl

Since November 2018: HÖRMER Martina

## Anniversary celebration "25 years of the Association of the Friends of the Hohe Tauern National Park"

On 8 November, in the presence of former Federal President Heinz Fischer the anniversary marking "25 years of the Friends Association" was celebrated on the premises of



Martina Hörmer assumed the presidency for the next five years.

Donau Versicherung Vienna as part of a special event. In the run-up to this special event, the annual general meeting was held with the election of a new presidium. Martina Hörmer, managing director of JA! Natürlich took over the presidency for the next five years. She succeeds Karl Stoss, who in the past five years has been able to successfully inspire partners from the private sector for the national park.



Anniversary event for "25 years of the Association of the Friends of the Hohe Tauern National Park" at Donau Versicherung in Vienna.

## Association of the Friends of the Hohe Tauern National Park



With the help of companies from the private sector, essential projects in the areas of species protection, environmental education and experiencing nature were realised once again in 2018. The "Association of the Friends of the Hohe Tauern National Park", the official sponsoring institution in the Hohe Tauern National Park, acts as a hub. The non-profit association is a co-opted member of the National Park Council and has set itself the goal of supporting the development of the national park – in coordination with the national park authorities of the federal provinces of Carinthia, Salzburg and Tyrol as well as the federal government. The supporting pillars of the Friends are made up of about 3,000 individual members and about 20 partners from the business world.

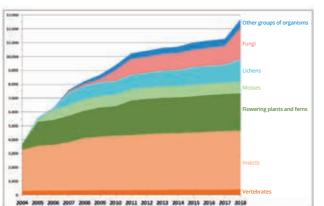


Fig. 5. Development of the number of taxa in the Hohe Tauern National Parks biodiversity database between 2004 and 2018

The biodiversity database of the Hohe Tauern National Park currently documents more than 12,000 different species (including subordinate systematic units).

#### Background

With the help of public funds from the three federal provinces of Carinthia, Salzburg, Tyrol and the federal government, the fulfilment of the core tasks of the national park is ensured. Given the cost-cutting measures to public sector budgets, additional programmes and vital projects can only be implemented with the help of companies from the private sector, individuals and non-profit institutions.

In order to further promote this idea of sponsoring and to offer the general public an opportunity to show their support for the park, the Friends of the Hohe Tauern National Park was founded in 1993. Such financing possibilities will play an im-

portant role in the future, whereby in addition to the financial support, the commitment to the "National park philosophy" and thus to the acceptance of the Hohe Tauern National Park is also of great importance.

#### Objective and purpose

Sponsoring is a communication instrument which, as an integrated component of a company's corporate social responsibility strategy, can represent an extremely gratifying entrepreneurial measure.

Environmental sponsoring has special significance. This is about "ecological credibility". Pure image improvement (Greenwashing) is rejected. The sponsoring of environmental projects only makes sense if it builds on a credible basis – i.e. if the sponsor has a genuine interest in the environmental issue and ecological sustainability is pursued as a declared objective in the highest company policy. In this way, interesting partnerships with added value for both sides can develop between the sponsor and the sponsored party, who often has important expertise on these issues.

#### PRESIDIUM OF THE ASSOCIATION OF THE FRIENDS

#### Members from 8 November 2018:

HÖRMER Martina, President
RIENER Harald, 1st Vice President
JACOBS Nicolas, 2nd Vice President
LANGES-SWAROVSKI Gernot, 3rd Vice President
STOSS Karl, 4th Vice President
WUTSCHER Werner, 5th Vice President
KOIDL Christian, Secretary
GOLLEGGER Karl, Treasurer

#### Advisory boards IMBODEN Christoph STOTTER Hermann STÜBER Eberhard URBAN Wolfgang

Director RUPITSCH Peter



There are still gaps in the knowledge of the lifestyle of the "King of the Alps", which the National Park is trying to fill through intensive research.

#### Thank you very much

... to all partners who supported our programmes and projects in 2018!

#### Swarovski Water School

Free offer for schools (third year of primary school to fourth year of secondary school). Delivered by national park rangers.

#### **SWAROVSKI**

#### Wilhelm Swarovski observation tower

Free offer for visitors of the Grossglockner High Alpine Road. Provision of high-quality optical

Supervision by the National Park Administration.



#### National park partner schools

Free offer to 73 partner schools. "This is what nature tastes like" module. Delivered by national park rangers.



#### **VERBUND** climate school of the Hohe Tauern National Park

Free offer for schools (fourth year of primary school to fourth year of secondary school). Delivered by national park rangers.



#### Herd protection project

Pilot project for the protection (predator) of herds on Alpine pastures



#### Youth programmes & promotional film

Support for the youth programmes and with the production of the promotional film.



#### Reintroduction of bearded vultures

Species conservation project: Part of an Alpine wide reintroduction project.



#### Marketing contribution

Partner for visitor facilities (exhibitions) at Kaiser-Franz-Josefs-Höhe.



#### Kärntnermilch Junior Rangers

Two-week training in the Hohe Tauern National Park – Carinthia for 13 to 15-year-olds.



#### National park academy programme

Support for the adult education facility in the national park.



#### "FreiRaum-Alm" project and biodiversity database

Support of Alpine pasture measures ("FreiRaum-Alm" (Alpine pasture space) projects) and development of the biodiversity database.



#### National park watch

Supporting the work of the association by JACQUES LEMANS providing national park watches.



#### Ibex research in the Hohe Tauern

Research into population dynamics using genetic samples and horn measurements



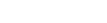
#### National park magazine for children

Free magazine for children aged between eight and twelve (Carinthia).



#### Visitor support

Support of the experience programmes of the national park administrations



#### Free of charge audit of the financial report of the

Audit of the financial report

association.



#### Autochthonous brown trout species protection project

Stocking and management of autochthonous brown trout stocks in selected waters of the national park



#### House of the Ibex

Support implementation project "Welcome Centre and House of the Ibex exhibition" in Heiligenblut.

#### **Organisation**

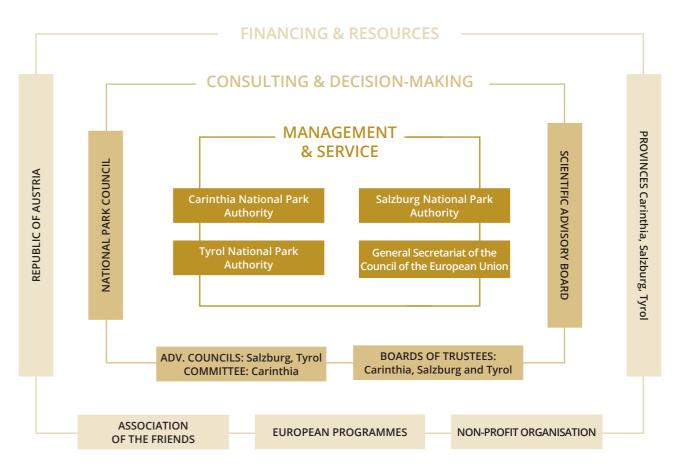
The division of power between the Republic of Austria and the Austrian federal provinces is naturally also reflected in the organisational structure of a national park covering all provinces. Even if the term "National park" would suggest the existence of a national institution, the Hohe Tauern National Park is legally three "provincial parks", as one would say in other countries, due to the legislative and executive competence of the federal provinces for nature conservation. Apart from these legal aspects, however, it is undisputed that the Hohe Tauern National Park also has a national interest and that all four regional authorities, the federal government and the provinces of Carinthia, Salzburg and Tyrol have always pursued the goal of coordinated further development, starting with the Heiligenblut Declaration in 1972 and later in state treaties pursuant to Article 15a of the Federal Constitution.

The organisation of the Hohe Tauern National Park can be represented by the following three levels: "Management and Service", "Consultancy and Decision Making" and "Financing and Resources".

At management level, there are the three national park administrations in Grosskirchheim / Carinthia, Mittersill / Salzburg and Matrei in East Tyrol / Tyrol, as well as the secretariat of the National Park Council based in Matrei in Osttirol. In these four administrative units, budgets are managed, projects and plans in the individual business segments are devised, coordinated, implemented and evaluated, and decision-making is prepared in the relevant committees.

All three federal provinces have set up advisory councils (Salzburg, Tyrol) and a committee (Carinthia) with boards of trustees (Carinthia, Salzburg, Tyrol) set up for making decisions. The individual national park laws provide for the comprehensive integration of all interests in and around the national park. The National Park Council has been set up at the political level and the Directorate at the executive level for matters affecting all the federal provinces. In addition to the relevant departmental members of the provincial governments of Carinthia, Salzburg and Tyrol, the Council also includes the Federal Minister for Sustainability and Tourism. A separate scientific advisory board advises the cross-provincial decision-making bodies of the Council and Directorate.

At the level of the provision of financial, personnel and material resources, you will find the three federal provinces of Carinthia, Salzburg and Tyrol as well as the Republic of Austria, represented again supplemented by the national park administrations and sponsorship funds, which are predominantly provided by the Association of the Friends of the Hohe Tauern National Park.



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#### **National Park Council**

#### Members of the Hohe Tauern National Park Council:

HUTTER Maria, LR<sup>in</sup> Dipl.-Päd<sup>in</sup>, Salzburg, Chair KÖSTINGER Elisabeth, BM<sup>in</sup>, Federal Republic, Vice Chair FELIPE-SAINT HILAIRE Ingrid, LH-Stv.<sup>in</sup> Mag.<sup>a</sup>, Tyrol SCHAAR Sara, LR<sup>in</sup> Mag.<sup>a</sup>, Carinthia

#### Members of the National Park Directorate:

URBAN Wolfgang, MBA Dipl.-Ing., Salzburg, Chair STOTTER Hermann, Dipl.-Ing., Tyrol, Vice Chair RUPITSCH Peter, Mag., Carinthia ZACHERL-DRAXLER Valerie, Mag.<sup>a</sup>, BMNT, Dept. III/6

#### Consulting experts:

ALTENBERGER Georg, Salzburg
ENZINGER Hannes, Bgm., Salzburg
HOFER Alwin, Carinthia
RUGGENTHALER Dietmar, Bgm., Ing., Tyrol
SCHACHNER Josef, Bgm., Carinthia
SCHNEEBERGER Friedrich, Tyrol
STÜBER Eberhard, Prof.Dr.Dr.h.c., Carinthia
WINDING Norbert, Dr., Salzburg

#### Co-opted representatives:

GLAESER Othmar, DI Dr., Salzburg
GLANTSCHNIG Gerold, Dr., Carinthia
HÖRMER Martina, Mag.a, President of Association of the Friends
KAPELLER Kurt, Dr., Tyrol
LUDEWIG Elke, Dr.in, Chair, Scientific Advisory Board

Version: 31 December 2018

#### Scientific Advisory Board

#### SCIENTIFIC ADVISORY BOARD

A Scientific Advisory Board was set up to provide expert advice to the national park administrations on the execution of their tasks in the field of research coordination. The board is active in the field of national park research particularly in strategy development, quality assurance and representation matters.

#### Members:

#### LUDEWIG Elke, Dr.in

Chair, Central Institution for Meteorology and Geodynamics, Salzburg

#### WRBKA Thomas, Ass. Prof. Dr.

Vice Chair, University of Vienna

#### KÖCK Günter, Mag. Dr.

Austrian Academy of Sciences (ÖAWIGF)

#### PETERSEIL Johannes, Mag. Dr.

Federal Environment Agency

#### SCHEURER Thomas, Dr.

formerly Academy of Natural Sciences (SCNAT9), Switzerland

#### SMOLINER Christian, Dr.

Federal Ministry for Education, Science and Research

#### VOGEL Michael, Dr

NABU international

#### VOHLAND Katrin, Dr.in

Museum for Natural History, Berlin

Version: 31 December 2018



Meeting of the National park Council in January 2018 at the National Park Centre, Mittersill.

#### Carinthian National Park Fund

#### NATIONAL PARK BOARD OF TRUSTEES

#### Composition:

 $Member of the \ Provincial \ Government \ (National \ Park \ Officer)$ 

Chair

SCHAAR Sara, LRin Mag.a

#### Community representatives

Members

NOVAK Günther, BR Bgm.

SUNTINGER Peter, Bgm.

Substitute members

RÜSCHER Klaus, Bgm. Mag.

SCHACHNER Josef, Bgm.

#### Landowner representatives

Members

**BÄUERLE Johann**, Heiligenblut

PIRKER Martin, Malta

Substitute members

GLANTSCHNIG Anton, Mag., Mallnitz

PLONER Thomas, Mörtschach

#### **Carinthian Provincial Government**

 ${\bf Ecology,\,nature\,\,and\,\,landscape\,\,conservation}$ 

Member

TSCHABUSCHNIG Harald, DI

Substitute member

**GUTLEB Bernhard, Mag.** 

#### **Carinthian Provincial Government**

Regional economy of the national park region

Member

MÜLLMANN Paula

Substitute member

**LACKNER Martin** 

#### Federal Ministry for Sustainability and Tourism

Member

ZACHERL-DRAXLER Valerie, Mag.<sup>a</sup>

Substitute member

ERLER Agnes, MSc

#### Österreichischer Alpenverein

Member

DAGOSTIN Liliana, MMag.a

Substitute member

RIEGER Ernst

#### NATIONAL PARK COMMITTEE

#### Composition:

7 community representatives

hair

SCHACHNER Josef, Bgm., Heiligenblut

GÖSSNITZER Anita, Bgm.in, Obervellach

NOVAK Günther, BR Bgm., Mallnitz

RÜSCHER Klaus, Bgm. Mag., Malta

SUNTINGER Peter, Bgm., Grosskirchheim

THALER Johann, Bgm., Winklern

UNTERREINER Richard, Bgm., Mörtschach

#### 14 landowner representatives

**BÄUERLE Johann**, Heiligenblut

EISANK Josef, Obervellach

FEISTRITZER Friedrich, Malta

FITZER Melitta, Mag.a, Winklern

GLANTSCHNIG Anton, Mag., Mallnitz

**HARITZER Thomas,** Heiligenblut

**HOFER Alwin,** Mallnitz

**HUBER Albert**, Obervellach

KEUSCHNIG Gerhard, Mörtschach

**LERCHBAUMER Lorenz, Ing., Winklern** 

PIRKER Martin, Malta

PLONER Thomas, Mörtschach

**SUNTINGER Josef,** Grosskirchheim

ZIRKNITZER Christian, Ing. Mag. (FH), Grosskirchheim

#### 2 representatives of the Carinthian

Provincial Government

BRANDNER Klaus, BH Dr.

GLANTSCHNIG Gerold, Dr.

#### 1 representative from the Chamber of

Agriculture and Forestry

MÖSSLER Johann, Präs. Ing.

#### 1 representative from the Federal Government

ZACHERL-DRAXLER Valerie, Mag.<sup>a</sup>

1 representative of the Österreichischer Alpenverein JURY Hans, Mag.

# I Organisation

#### Salzburg National Park Fund

#### NATIONAL PARK BOARD OF TRUSTEES

Composition:

Chair

HUTTER Maria, LRin Dipl.-Päd.in

1st Deputy Chair

**ALTENBERGER Georg, Obmann** 

Substitute member

**BLAIKNER Alois** 

2. Deputy Chair

**ENZINGER Hannes, Bgm.** 

Substitute member

TOFERER Hans, Bgm.

#### Members

BERNINGER Ulrike-G., Univ.-Prof.in Dr.in

HINTERSTOISSER Hermann, Prof. DI

LERCHBAUMER Hannes, Bgm.

MEDEM Michael, Graf von

OBERMOSER Michael, Bgm. LAbg.

STEINER Hans, Bgm. a.D.

#### Substitute members

COMES Hans-Peter, Univ.-Prof. Dr.

**HUTTEGGER Rupert** 

KÖNIG Karin, Mag.<sup>a</sup>

LOITFELLNER Peter, Bgm.

NINDL Peter, Bgm.

SALZMANN Matthias

#### Representative from the Federal Government

Member

ZACHERL-DRAXLER Valerie, Mag.<sup>a</sup>

Substitute member

ERLER Agnes, MSc

#### **FUND COMMITTEE**

#### Composition:

Chair

GRATZ Bernhard, BH Mag. Dr.

Deputy

WIMMER Harald, BH Mag.

#### Members

ATZMANSTORFER Edgar, Dr.

BERGER Karin, LAbg.e

BURTSCHER Sophia, Mag.a

DÖTTERL Stefan, Univ. Prof. Dr.

GASSNER Manfred, Bgm.

**GEISLER Friedrich** 

GLAESER Othmar, DI Dr.

**GRIESSNER Sebastian** 

HERBST Winfrid, Mag. Dr.

**HUBER Otmar** 

**HUFNAGL** Dietmar, Mag.

LOHFEYER Hubert, Bgm. Ing. Mag.

NINDL Peter, Bgm.

OBERMOSER Michael, LAbg. Bgm.

**SCHARLER Anton** 

SCHEINAST Josef, LAbg.

**SLUPETZKY Brigitte** 

SOMMERAUER Otmar, Dr.

STEINBAUER Gerhard, Bgm.

STEINER Günter, Bgm.

THÖNY Barbara, MBA LAbg.e

WEINBERGER Winfried, DI

WEITGASSER Elisabeth, LAbg.

ZANDL Josef, Ing.

#### Substitute members

AUGUSTIN Hannes, Dr.

**BLAICKNER Hubert** 

CZERNY Erich, Bgm. Mag.

DOLLINGER Karin, LAbg. MMMag. Dr. in

EGGER Josef, MBA, LAbg.

EYMANNSBERGER Helmut, Mag.

GÖSTL Rudolf, Ing.

HUMER-VOGL Kimbie, LAbg.e Mag.a Dr.in

**IORDAN Karl, DI** 

JUNKER Robert, Ass.-Prof. Dr.

**KALTENHAUSER Georg** 

**KALTENHAUSER Siegfried** 

KANDLER Ernst Josef, Bgm.

KRAUS Peter, DI

LAIREITER Christian, Mag.

**MEILINGER Franz** 

OBERMOSER Michael, LAbg. Bgm.

PONGRUBER Manfred, DI

**POSCH Wolfgang** 

**RENN Josef** 

RETTENEGGER Gottfried, Ing. Mag.

SCHERNTHANER Hannes, LAbg. Bgm.

SCHWARZENBERGER Helmut, MIM

TEUFL Andreas, LAbg.

ÜBLAGGER Hannes, DI

VIERTLER Wolfgang, Bgm. Dr.

Version: 30 November 2018

#### **Tyrolean National Park Fund**

#### NATIONAL PARK BOARD OF TRUSTEES

#### Composition:

#### Chair

FELIPE-SAINT HILAIRE Ingrid, LH-Stv.in Mag.a

#### Members

**DUREGGER Norbert,** Gaimberg

HAUSER Gerald, NR Mag., St. Jakob i.D.

JESACHER Hubert, Vize-Bgm., St. Jakob i.D.

KANTNER Birgit, Mag.a, ÖAV, Innsbruck
KAPELLER Kurt, Dr., Environmental Protection,

Province of Tyrol, Innsbruck

KÖLL Andreas, Bgm. Dr., Matrei i.O.

MAYERL Martin, LAbg., Dölsach

PFURNER Andreas, Bgm. Ing., Nussdorf-Debant

RUGGENTHALER Dietmar, Bgm. Ing., Virgen

SCHNEEBERGER Friedrich, Matrei i.O.

SPRENGER Daria, Dlin, Land Use, Province of Tyrol, Innsbruck

UNTERWEGER Klaus. Kals a.Gr.

#### Substitute members

DAGOSTIN Liliana, MMag.ª, ÖAV, Innsbruck

**DEFREGGER Joachim**, Iselsberg-Stronach **EGGER Heinrich**, Prägraten

**GRODER Alois,** Kals a.Gr.

HOPFGARTNER Franz, Bgm. Ing., Hopfgarten i.D.

KÖLL Christoph, Matrei i.O.

MAIR Josef, Bgm., Dölsach

MATTERSBERGER Elisabeth, BRin Vize-Bgm.in, Matrei i.O.

RINNER Sandra, Mag.a, Innsbruck

STAMPFER Christian, DI, Innsbruck STEMBERGER Andreas, St. Veit i.D.

WURNITSCH Gregor, Virgen

#### Representative from the Federal Government

ZACHERL-DRAXLER Valerie, Mag.<sup>a</sup>

#### FUND COMMITTEE

#### Composition:

Chair

STEINER Anton, Bgm., Prägraten

#### Members

BACHER Reinhold, Virgen
DIEMLING Martin, DI, Lienz

ENGEL Erik, Hopfgarten i.D.

**ERLSBACHER Robert,** St. Jakob i.D.

FASCHING Alois, Dölsach

GASSER Wolfgang, Bgm.-Stv., Virgen

FÜREDER Leopold, Ao. Univ.-Prof. Mag. Dr., Innsbruck

GEIGER Robert, Lienz

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IDL Günther, Nussdorf-Debant

KÖNIG Martin, BJM Ing., Nikolsdorf

LOBENWEIN Reinhard, Mag., Lienz

MARINER Leo, Virgen

MONITZER Vitus, Bgm., St. Veit i.D.

NIEDRIST Josef, Matrei i.O.

OBERBICHLER Gertraud, Bgm.-Stv.in, Nussdorf-Debant

PUTZHUBER Markus, Matrei i.O.

REISNER Olga, Bezirkshauptfrau Dr.in, Lienz

SALCHER Herbert, Nussdorf-Debant

SCHOBER Manuela, Nussdorf-Debant

STEINER Mathias, Matrei i.O.

**THEURL Franz,** Chair of the East Tyrol tourist board, Lienz

TÖNIG Markus, Bgm.-Stv., Hopfgarten i.D.

TSCHAPELLER Thomas, Bgm., Iselsberg-Stronach

WEISKOPF Johann, Prägraten

WURNITSCH Adelheid, Prägraten

#### Substitute members

AICHNER Michael, Lienz

**GLANTSCHNIG Stefan, Ing.,** Lienz **GRIMM Andreas,** Hopfgarten i.D.

**GUMPITSCH Johann**, Dölsach

HAIDER Hermann, Lienz HATZER Anton, Vize-Bgm., Prägraten

HOFER Johann, St. Lorenzen/Italy

JESACHER Christian, St. Jakob i.D.

KOLLREIDER Wilfried, Mag., Lienz

MONITZER Vitus, Bgm., St. Veit i.D.

OBKIRCHER Elke, Dlin, Virgen
OPPENEIGER Alois, Virgen

PICHLER Bernhard, Mag., Lienz

PRESSLABER Albert, Matrei i.O.

PSENNER Roland, Univ.-Prof. Dr., Innsbruck

**WALDER Anton, Vize-Bgm.,** Iselsberg-Stronach **RAINER Theresia,** Matrei i.O.

**RETTER Wolfgang, Dr.,** Lienz

RIEPLER Michael, Matrei i.O. SCHNELL Rupert, Kals a.Gr.

WARTUSCH Carola, Mag.a, Innsbruck

WALLENSTEINER Manfred, Dölsach WEINGARTNER Hannes, Dölsach

WINKLER Josef, Lienz

#### **Nature Conservation Officer**

**HUPF Siegfried,** Virgen

PRESSLABER Christian, Virgen

Version: 30 November 2018

## Nationalpark Hohe Tauern

Salzburg and Tyrol develop projects and ideas and implement tourism, education and in our visitor centres work with considcommittee decisions and resolutions. Employees in the areas erable commitment and conviction. of administration, finance, public relations, research, natural

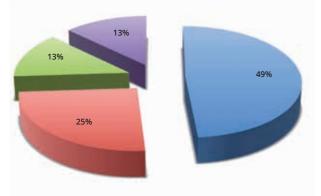
The employees of the Hohe Tauern National Park in Carinthia, environment management, service, legal service, visitor care,



#### Budget for the 2018 national park year

#### **BUDGET REVENUE:** € 11,718,834.00

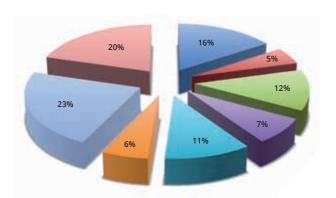
Grants, province (excl. province personnel)	€ 5,714,300.00	49%
Grants, state	€ 2,953,959.00	25%
Grants from funding programmes	€ 1,547,456.00	13%
Non-profit activities and sponsors	€ 1,503,119.00	13%
TOTAL	€ 11,718,834.00	100%



- Grants, province (excl. province personnel)
- Grants, state
- Grants from funding programmes
- Non-profit activities and sponsors

#### BUDGET EXPENDITURE: € 11,718,834.00

Natural resource management	€ 1,838,900.00	16%
Science and research	€ 597,351.00	5%
Education and visitor information	€ 1,418,895.00	12%
Preservation of the cultural landscape	€ 877,099.00	7%
Region and tourism	€ 1,273,720.00	11%
Administration	€ 680,544.00	6%
Personnel	€ 2,638,148.00	23%
Investments	€ 2,394,177.00	20%
TOTAL	€ 11,718,834.00	100%



- Natural resource management
- Region and tourism
- Science and research
- Administration
- Education and visitor information
- Personnel
- Preservation of the cultural landscape
  Investments

The figures given are rounded and consist of the individual budget figures of the National Park Funds for Carinthia, Salzburg, Tyrol and the Council Secretariat Association. They are intended to give a rough overview about the origin of funds for the Hohe Tauern National Park and their usage. Detailed information can be found in the financial statements and balance sheets of the individual National Park Funds and the

Council Secretariat Association. Besides allocating funds, the three provinces also provide support in different forms and intensities through the provision of personnel, infrastructure, IT, vehicle fleets, etc., which are neither evaluated nor presented in this simple presentation of the cash flow nor in the annual financial statements.

#### Outlook







The first pages of this activity report – the forewords of our top decision-makers in the national park – mostly show "newcomers". All members of the National Park Council, the representatives of the provinces of Carinthia, Salzburg and the Republic of Austria have changed, with the exception of Tyrol.

We, the national park administrations, will endeavour to give our new heads of department a good foundation and a sound basis very quickly for the most critical decisions on national park policy and strategy in the individual province governments and at federal level. At the same time, this will ensure that in the coming years there will be plenty of space and energy for a joint, cross-province further development of our protected area management. We are very happy to be at your disposal with all our employees.

"Subsidiarity" is on everyone's lips when it comes to cooperation between member states in the European Union. This principle that tasks should always be performed at the level of responsibility and management where this is most efficient and effective has also proved its worth for our national park spanning three provinces.

This enables us to provide tailor-made answers to the regionally often different and specific demands in the areas of partner schools, agricultural, forestry and hunting interests, tourism or mineral collection and regional development. Furthermore, we want to use synergies of cooperation when it comes to large species conservation projects, internationally respected monitoring and research issues, a professional joint appearance of the National Park to the outside world or the development of pedagogically and didactically high-quality environmental education programmes.

Jubilees that we celebrated in 2018, such as "100 Years of the Albert Wirth Donation" or "25 Years of the Association of the Friends of the Hohe Tauern National Park" showed us how - beyond political decisions - partnerships and private commitment were and are important for the successful further development of our national park. This will not change in the future and in 2019 we are looking forward to working together again with sponsors and partners from industry, the Alpine Clubs that are irreplaceable in the Hohe Tauern High Mountain National Park and national and international nature conservation organisations.

The National Park Directors

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#nationalparkhohetauern

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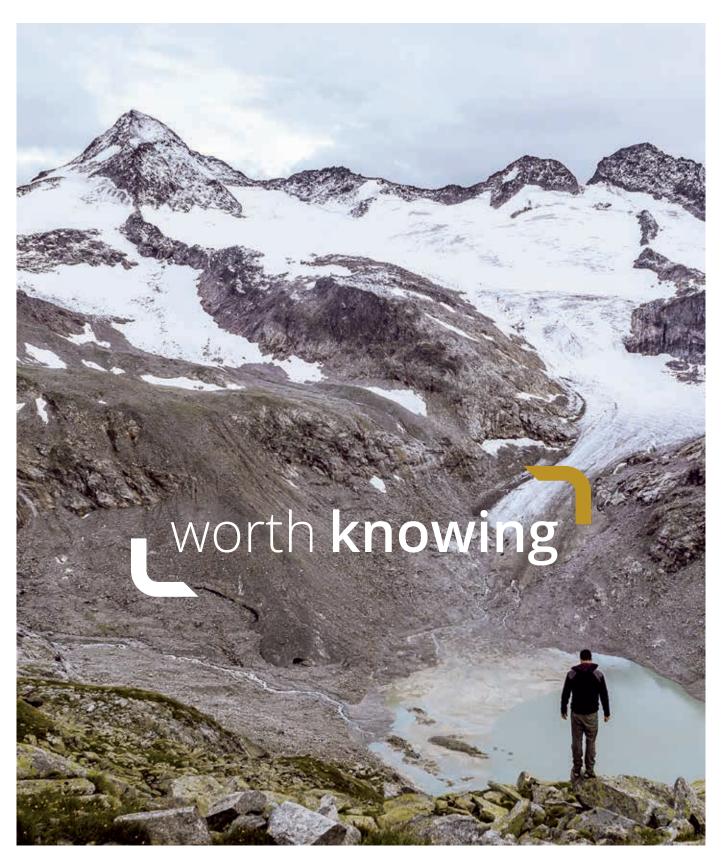


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