# 5<sup>th</sup> Symposium for Research in Protected Areas

10 - 12 JUNE 2013 — NATIONALPARK HOHE TAUERN ZENTRUM, MITTERSILL



GEFÖRDERT AUS MITTELN DER EU UND DES BUNDES



Europäischer Landwitschaftefunds für die Erminklung des ländlichen Raumz: Hier investiert Europe in











Dear Participants,



a national park is an obvious place for holding such an event. All six Austrian national parks are not only paragons of conservation and species diversity but also major research sites. In their research activities the national parks contribute to a national task, which they fulfil at a very high scientific level. This research provides support for the protected area management and beyond.

Initiated by the Ministry of Life, the national parks and the NGOs, cooperation between the Austrian national parks has been intensified in recent years under the overall brand of Nationalparks Austria. Nowhere is this cooperation of six national parks more useful than in research. In addition to many other positive effects, it helps to make work of the national parks in this area transparent and available for many other areas.

Hohe Tauern National Park is the oldest national park in Austria. A region with a rich history, a long tradition and plenty of nature. The Alps host one of the largest pools of biodiversity in Europe. The European Network of Alpine Protected Areas fulfils a key function of ensuring this biodiversity. All research findings and research initiatives discussed here relate directly to the protection and maintenance of the biodiversity of this sensitive area and are thus of great significance for us all.

This year's event here in Hohe Tauern National Park is the first in cooperation with National parks Austria, ALPARC and DanubePARKS. Its theme is "Dynamics and conservation in protected areas - challenges for research and management".

I wish all participants of the 5<sup>th</sup> Symposium on Research in Protected Areas informative, forward-looking and productive debates and look forward to the outcomes of this event!

Mi)

DI Nikolaus Berlakovich Federal Minister of Agriculture, Forestry, Environment and Water Management



#### Contact for the conference

Kristina Bauch and Johanna Gandler Hohe Tauern National Park Gerlos Straße 18/2 5730 Mittersill

Austria

phone: +43 (0)6562 40849

e-mail: <u>nationalpark@salzburg.gv.at</u>
Web: <u>www.hohetauern.at/symposium2013</u>

Web: www.hohetauern.at

#### Conference office

at the Nationalpark-Zentrum Foyer:

#### Opening times:

Sunday, 9 June 2013: 14:00 – 20:00 Monday, 10 June 2013: 07:00 – 18:00 Tuesday, 11 June 2013: 08:00 – 16:30



Rooms in the Nationalpark-Zentrum Mittersill:

Nationalpark-Zentrum I Nationalpark-Zentrum II Foyer

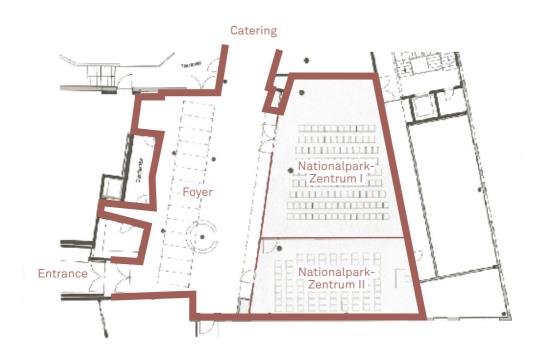
Arena

Parish hall of Mittersill:

next to the church, 10 min walking distance from the Nationalpark-Zentrum

Tent:

next to the Nationalpark-Zentrum





07:00

Registration — Nationalpark-Zentrum Foyer -

08:45

Welcome — Nationalpark-Zentrum I -

Wolfgang Viertler, Mayor of Nationalpark-City Mittersill

Christian Wörister, Tourism Director of Ferienregion Nationalpark Hohe Tauern

Viktoria Hasler, Chair of Coordination committee Nationalparks Austria, Federal Ministry of Agriculture, Forestry, Environment and Water Management

Erich Mayerhofer, "Verein Nationalparks Austria"

Nationalpark-Zentrum I -

09:00

### Trajectories for protected areas

Chair: Kristina Bauch, Hohe Tauern National Park Salzburg (AT)

09:00 Prioritization of river protection measures and strategies

Susanne Muhar, keynote, BOKU University Vienna (AT)

09:20 World Natural Heritage Sites - triggers for sustainable development processes? Results of a global survey Katharina Conradin, keynote, University of Bern (CH)

09:40 Protected areas and climate change impact research roles, challenges, needs

> Harald Pauli, keynote, ÖAW - Institute for Interdisciplinary Mountain Research, Vienna (AT)

10:00 Wildlife management concepts for large protected areas

Sven Herzog, keynote, Technical University Dresden (DE)



Nationalpark-Zentrum I -

11:00

### Biodiversity - impact of environmental change

Chair: Peter Huemer, Tyrolian Federal

State Museum Ferdinandeum, Innsbruck (AT)

11:00 Horrible dynamics in old conservative systems? Undercooled scree slopes in the Austrian Alps - fauna, significance and threat in times of climate change Christian Komposch, ÖKOTEAM - Institute for Animal Ecology and Landscape Planning, Graz (AT)

11:20 Impact of climate warming - upslope shift in the distribution of a land snail species in the Swiss **National Park** 

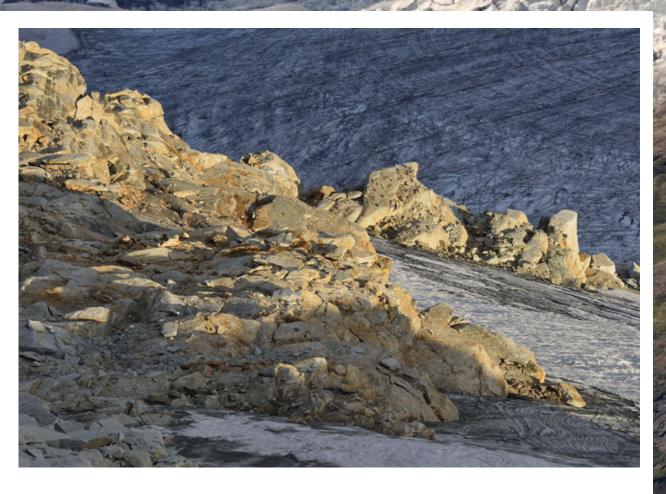
Bruno Baur, University of Basel (CH)

11:40 Mobility patterns in Alpine Erebia (Nymphalida) populations: Does a large road act as a dispersal barrier?

Daniela Polic, University of Vienna (AT)

12:00 A review of research on Pinus cembra in Austria, with special reference to the conservation of genetic resources

Berthold Heinze, Federal Research and Training Centre for Forests, Natural Hazards and Landscape, Vienna (AT)



Nationalpark-Zentrum II -

### Landscape management

Chair: Thomas Scheurer, ICAS/ISCAR, Bern (CH)

- 11:00 Parks and landscapes in Europe:
  towards an integration of policies and management
  Attilia Peano, Politecnico di Torino (IT)
- 11:20 Beyond the inventory change detection at landscape level using aerial photographs in four protected areas of the Alps

Ruedi Haller, Swiss National Park, Zernez (CH)

11:40 The Carpathian Ecological Network: GIS approach to detect the landscape permeability for particular umbrella species

Filippo Favilli, European Academy Bolzano – EURAC Research (IT)

12:00 Landscape observatories as a tool for managing protected areas - the case of Sierra Nevada, Spain
Andres Caballero Calvo, University of Granada (ES)

Parish Hall

# Sustainable development - drivers, paths, strategies

Chair: Valerie Braun, IGF - Institute for Interdisciplinary Mountain Research, Innsbruck (AT)

11:00 Paths to sustainable regional development in Colombian protected areas

Axel Borsdorf, IGF - Institute for Interdisciplinary Mountain Research, Innsbruck (AT)

11:15 Architecture. A main factor of development and protection of the mountain environment

Estelle Lepine, Federal Polytechnic School f Lausanne - EPFL (CH)

11:25 Lables of protected areas: best practices for a sustainable regional development. The case study of the Italian Alpine protected areas

Andrea Omizzolo, European Academy Bolzano –

URAC Research (IT)

11:35 Research and planning priorities in managing the sustainable development and protection in Serbia

Nikola Krunic, Institute of Architecture
Ind Urban Spatial Planning of Serbia, Belgrade (RS)

11:45 Chaired debate



14:00

# Nationalpark-Zentrum I -

### Forest management

Chair: Wolfgang Scherzinger, University of Salzburg (AT)

14:00 Effects of spruce bark beetle calamities on the faunistic biodiversity of mountain forests in the Alpine Berchtesgaden National Park

Maria-Barbara Winter, Georg August University Göttingen (DE)

14:20 Biodiversity in managed and unmanaged forests: a comparison based on the strict forest reserves network in France

> Nicolas Debaive, Réserves naturelles de France, Quétigny Cedex (FR)

14:40 Changes in species composition of vegetation and epigeic spider communities in oak-hornbeam forest in Bab (Slovakia) during 40 years

Julius Oszlanyi, Slovak Academy of Sciences, Nitra (SK)

15:00 Forest disturbance monitoring system, based on high spatial resolution satellite images, in Kalkalpen National Park

Antonia Osberger, University of Salzburg (AT)

:30 III 30 min coffee break \*\*

Nationalpark-Zentrum I -

16:00

# Management - Beyond the borders

Chair: Christian Baumgartner, Donau-Auen National Park (AT)

16:00 Planning in England's National Parks. Planning practice in England's National Parks: findings of the 2012 survey Nicola Thompson, University of Newcastle (UK)

16:20 Challenges for protected mountain areas in Central and Eastern Europe. Examples from Poland and Ukraine Agata Warchalska-Troll, Jagiellonian University, Krakow (PL)

16:40 Adapting conservation management to climate change - challenges and solutions from protected areas in Central Europe

Sven Rannow, Leibniz Institute of Ecological Urban and Regional Development, Dresden (DE)

17:00 Park assessment in Switzerland:

from controlling single parks to a systematic evaluation across all parks

Marcel Hunziker, Swiss Federal Institute for Forest, Snow and Landscape Research WSL, Birmensdorf (CH)

30 150 min individual break

Nationalpark-Zentrum I — in German -

20:00

#### Public talk

Chair: Wolfgang Urban, Director of the Hohe Tauern National Park

20:00 Welcome

Wolfgang Viertler, Mayor of Nationalpark-City Mittersill Tina Widmann, Member of the provincial government

20:15 T00 Jahre Nationalpark-Idee in den Hohen Tauern
Patrick Kupper, Swiss Federal Institute of Technology ETH
Zurich (CH)

22:00 End

# Long-term ecological research in freshwater ecosystems

Chair: Alois Herzig, University of Vienna (AT)

14:00 Framework for long-term ecological research in Alpine river systems

Leopold Füreder, University of Innsbruck (AT)

14:20 Faunistic characterization of Alpine springs in the Swiss National Park

Susanne Felder, University of Basel (CH)

14:40 Who is eating what? Functional feeding-group composition in Alpine rivers

Alexandra Mätzler, University of Innsbruck (AT)

15:00 Impact of flooding on bug communities (Heteroptera) on meadows of the Morava River

floodplains, Eastern Austria
Marian Gratzer. University of Vienna (AT)

# How compatible are protected areas' and society's expectations of conservation?

Chair: Ingo Mose, University of Oldenburg (DE)



14:00 The Zen of driving a motorcycle through a national park: reconciling group-oriented with practice-oriented research approaches

Norman Backhaus, keynote, University of Zurich (CH)

14:15 Societal research perspectives on protected areas in Europe

Mose, University of Oldenburg (DE)

4:20 The cultural dimension of sustainable regional and landscape development in protected areas

14:25 A participatory method for agrobiodiversity conservation

eni Rohrbach, University of Zurich (CH)

14:30 Chaired debate

Nationalpark-Zentrum II -

### Conservation strategies in rivers

Chair: Leopold Füreder, University of Innsbruck (AT)

16:00 How restoration measures can affect biogeochemical cycles in protected floodplain areas along the Danube River

Thomas Hein, BOKU University Vienna, WasserCluster Lunz (AT)

16:20 Rehabilitation measures in the main channel of a free-flowing stretch of the Danube: development of meaningful sampling procedures and applicable sampling designs to study effects on the fish assemblage

Hubert Keckeis, University of Vienna (AT)

16:40 Ways to merge conservation needs and recreational fisheries in protected areas

Kurt Pinter, BOKU University Vienna (AT)

17:00 Strategies for the sustainable management of salmonid fish populations in Alpine waters with special emphasis on protected areas and national parks
Günther Unfer, BOKU University Vienna (AT)

Parish Hall

# Biodiversity – $\alpha$ , $\beta$ , $\gamma$ - diversity

Chair: Bernd Stöcklein, University of Applied Sciences Weihenstephan (DE)

16:00 Mercantour-Alpi Maritime generalized biological inventory: an example of successful collaboration between the management of protected areas and taxonomists Marie-France Leccia, Mercantour National Park, Nice (FR)

16:20 Meadows and pastures - islands of biodiversity in Kalkalpen National Park (Upper Austria) Susanne Aigner, eb&p Environmental Agency Ltd., Klagenfurt (AT)

16:40 Vegetation survey of Thayatal National Park - status, results and outlook

Thomas Wrbka, University of Vienna (AT)

17:00 Current distribution and abundance of endangered bird species in Hohe Tauern National Park: combining field work and habitat modelling Matthias Gattermaier, REVITAL Integrative Naturraumplanung GmbH, Lienz (AT)

17:20 Short announcement ad: Austrian Biodiversity Initiative for Protected Areas

Fritz Schiemer, University of Vienna (AT)



08:00

08:30

Registration — Nationalpark-Zentrum Foyer

Nationalpark-Zentrum I -

# Wildlife management

Chair: Guido Plassmann, ALPARC, Chambery (FR)

08:30 Density estimations of Eurasian lynx (Lynx lynx) from long term camera trap data in the Bohemian Forest Ecosystem

Kirsten Weingarth, Bavarian Forest National Park, Grafenau (DE)

08:50 Research, conservation and management of capercaillie in Paneveggio - Pale di San Martino Natural Park (Eastern Italian Alps)

Luca Rotelli, Parco Naturale Paneveggio, Pale di San Martino (IT)

09:10 Effects of wildlife management in national parks on its populations. Where to go?

> Dominik Dachs, Austrian Federal Forests, Kalkalpen National Park administration, Molln (AT)

09:30 Resource competition between chamois, Alpine ibex and red deer in the Swiss National Park

Pia Anderwald, Swiss National Park, Zernez (CH)

30 min coffee break \*

10:30

#### Poster Session

10:30 Poster presentations

11:45 Nationalparks Austria

Poster Award

Chair: Christian Baumgartner, Nationalparks Austria Research-Team

12:00 Conference group foto

90 min lunch break\*

Nationalpark-Zentrum I -

13:30

# Mountains and their protected areas: research perspectives

nsen Gurung, Mountain Research Initiative (MRI), Manager MRI-Europe, Bern (CH)

13:30 Designing research in protected areas theory and reality Michael Jungmeier, University of Klagenfurt (AT)

13:50 Swiss Parks of national importance: research perspectives and potential topics Astrid Wallner, Coordination Research on Swiss Parks,

14:10 Mountain ecosystems in a changing environment Christian Körner, University of Basel (CH)

14:30 Research for sustainable communities Anthony Patt, IIASA - International Institute for Applied Systems Analysis, Laxenburg (AT)

15:00 30 min coffee break \*\*

Nationalpark-Zentrum II -

Parish Hall

# Protection of fluvial dynamics

Chair: Thomas Hein, BOKU University Vienna, WasserCluster Lunz (AT)

- 08:30 Human impact on hydrographic processes in the aquatic complex of Hutovo Blato Nature Park Muriz Spahic, University of Sarajevo (BA)
- 08:50 Monitoring and Modelling of Sediment and Habitat at the Alluvial Zone National Park of the Austrian Danube
  Marcel Liedermann, BOKU University Vienna (AT)
- 09:10 River-bed degradation and overbank deposition: an anthropogenic geomorphic disequilibrium in Donau-Auen National Park Gerhard Klasz, University of Technology Vienna (AT)
- 09:30 The development of abandoned side-channels: ecological implications and future perspectives Walter Reckendorfer, WasserCluster Lunz (AT)

### Biodiversity - hands on, hands off

Chair: Katharina Aichhorn, Hohe Tauern National Park Carinthia (AT)

- 08:30 Destructive and constructive effects of mudflows –
  primary succession and success of pasture
  regeneration in Sölktäler Nature Park (Styria, AT)
  Andreas Bohner, Agricultural Research and Education Centre,
  Irdning (AT) and Silvia Winter, BOKU University Vienna (AT)
- 08:50 Regeneration of subalpine plant communities in Kalkalpen National Park (Northen Alps) after different fire events Michel Max Kalas, University of Graz (AT)
- 09:10 Erasing a biodiversity hotspot: open woodlands, veteran trees and mature forests succumb to forestry intensification, logging and succession in Lower Morava UNESCO Biosphere Reserve

  Lukas Cizek, Biology Centre ASCR, Ceske Budejovice (CZ)
- 09:30 Monitoring of biodiversity in the core zones of Wienerwald Biosphere Reserve

  Markus Staudinger, AVL ARGE Vegetationsökologie und Landschaftsplanung GmbH, Vienna (AT)

Nationalpark-Zentrum II

# Cryosphere research

Chair: Günter Köck, Austrian Academy of Science, Vienna (AT)

- 13:30 Ground temperature and permafrost evolution in Hohe Tauern National Park 2006-2012: signals of a warming climate?
  - Andreas Kellerer-Pirklbauer, University of Graz (AT)
- 13:50 Long-term monitoring of mountain permafrost at
  Kitzsteinhorn, Hohe Tauern conceptual approach and
  preliminary results from the MOREXPERT project
  Markus Keuschnig, alpS Centre for Climate Change
  Adaptation Technologies, Innsbruck (AT)
- 14:10 The effect of climate change during the Lateglacial in the Hohe Tauern
  - Jürgen M. Reitner, Geological Survey of Austria, Vienna (AT)
- 14:30 Formation of glacial lakes a recent dynamic process in the Hohe Tauern National Park

Hans Wiesenegger, Hydrological Service Salzburg (AT)

- Parish Hall

# Natura 2000 - challenges for environmental management

Chair: Alexander Maringer, Gesäuse National Park (AT)

- 13:30 Analysis of Natura 2000 habitats and species in Hohe Tauern National Park Carinthia and Salzburg Gregory Egger, eb&p Environmental Agency, Klagenfurt (AT)
- 13:50 EMaRT: Expert Monitoring and Reporting Tool possibilities for the use of innovative web technologies in long-term monitoring of Natura 2000 territories Elisabeth Weinke, University of Salzburg (AT)
- 14:10 The impact of alien plant species on the conservation success of a protected Natura 2000 area, within the ecological restoration of the river Traisen, Lower Austria Katharina Lapin, BOKU University Vienna (AT)
- 14:30 EO-based monitoring of Europe's most precious habitats inside and outside protected areas

  Stefan Lang, University of Salzburg (AT)



Nationalpark-Zentrum I -

15:30

### Biodiversity management

Chair: Michael Vogel, Berchtesgaden National Park (DE)

15:30 Monitoring dormice (Gliridae) populations as a method of evaluating the efficiency of biodiversity management tools in Gradistea Muncelului - Cioclovina Nature Park Catalina-Ioana Dragoi, Gradistea Muncelului-Cioclovina Nature Park Administration, Deva (RO)

15:50 Long-term monitoring of grazing in salt habitats on the eastern shore of Lake Neusiedl

Ingo Korner, AVL Arge Vegetationsökologie GmbH, Vienna (AT)

16:10 Effect of active conservation management on biodiversity: multi-taxa survey in oak woodlands of Podyji National Park (CZ)

Pavel Sebek, University of South Bohemia, Ceske Budejovice (CZ)

16:30 Succession processes lead to a loss of grasslands in the Alps. But is it useful in conservation terms to use high-altitude meadows as pastures? New insights from Gesäuse National Park using ciccadas as indicator group. Gernot Kunz, University of Graz (AT)

17:00 120 min individual break

Nationalpark-Zentrum Arena

19:00

# Gala Evening

musical interlude through an ensemble of the Musikum

19:00 Admittance

19:30 Welcome

Wolfgang Urban, Director of the Hohe Tauern National Park Christian Wörister, Tourism Director of Ferienregion National park Hohe Tauern

Wolfgang Viertler, Mayor of Nationalpark-City Mittersill Tina Widmann, Member of the provincial government Salzburg

Conclu 5th Symposium for Research in Protected Areas 2013

Günther Köck, Chair of the Scientific Board

Nationalparks Austria Science Award 20 (in German)

Awarded by Niki Berlakovich, Federal Minister, Federal

Awarded by Niki Berlakovich, Federal Minister, Forestry, Environment and Wanagement

Chair: Diana Gregor, Project manager "Nationalparks Austria Öffentlichkeitsarbeit 2012-2014"

Gala buffet

# Biodiversity - functions and values

Chair: Thomas Wrbka, University of Vienna (AT)

15:30 Effects of gravel mining and its cessation on the surface-active arthropod fauna of mountain stream valleys in Gesäuse National Park, Styria, Austria Klaus Peter Zulka, University of Vienna (AT)

15:50 Soil Crust InterNational (SCIN) - Understanding and valuing biological soil protection of disturbed and open land surfaces

Thomas Peer, University of Salzburg (AT)

16:10 Linking the wilderness continuum concept to protected areas

Christoph Plutzar, Institute of Social Ecology SEC, Vienna (AT)

16:30 Landscape services and structural fuctionality assessment in the transboundary Lake Neusiedl Fertö region

Michael Kuttner, University of Vienna (AT)

# What quality standards for sustainable tourism?

Chair: Dominik Siegrist, University of Applied Sciences Rapperswil and CIPRA International (CH)

15:30 Urban sprawl and protected areas - How effective are buffer zones in reducing recreation impacts on an urban national park?

Arne Arnberger, keynote, BOKU University Vienna (AT)

15:45 Quality standards for nature-based tourism in protected areas in the Alps

Dominik Siegrist, University of Applied Sciences

apperswil (CH)

15:50 Tourist segments for new facilities in an Alpine national park area: profiling tourists in Norway based on psychographics and demographics

Knut Veisten, Institute of Transport Economics, Oslo (NO)

Tourist-typology research in protected areas
Christine Bild, University of Marburg (DE)

16:00 Chaired debate







# Biological soil crusts and lichens – extreme biocoenosis at the snow line

Guide Roman Türk, University of Salzburg

Meeting point Mittersill – car park at the Nationalpark-Zentrum

Departure 07:50 for 08:00

Route

By bus from Mittersill to Hochtor on the Großglockner High Alpine Road (2,500 m.a.s.l.). From there Roman Türk leads the walk via Mt. Rossköpfl (2,590 m) along the Klagenfurt Anniversary Path to Weißenbachscharte gap (2,650 m) and on towards Mt. Moderegg (2,900 m). The focus of this special excursion are the soil crust biocoenosis, higher plants and cryptogams, which are currently being investigated within the international project SCIN (SoilCrust International) on a sample area in Hohe Tauern National Park. To enjoy the route, you need to be fit enough to walk for four hours on high mountain tracks. There are no huts on this route, bring your own food and drink.

Return Around 18:00 to Mittersill

(car park at the Nationalpark-Zentrum)

Equipment

Some food and drinks, warm and weatherproof clothing, alpine boots with a good profile and rigid sole are a must, headgear, sunglasses and sunscreen, magnifying glass with 5 – 10x magnification recommended, trekking poles are helpful

Participants

max. 25 people, min. 8 people

Level

Demanding, old snow fields might have to be crossed, surefootedness required (slippery stone slabs and steep snow fields might have to be crossed)

If the weather does not allow this excursion to be held (e.g. new snow or extreme weather), an alternative route will be offered in the same area. If the weather is such that snow chains are mandatory on the Großglockner High Alpine Road or the road is closed altogether, this excursion will be cancelled without alternatives offered.



# Wilderness Area in the Hohe Tauern National Park – an ambitious vision?

Feri Lainer, Hohe Tauern National Park Salzburg

Mittersill – car park at the Nationalpark-Zentrum

06:20 for 06:30

By bus from Mittersill via Neukirchen to the Abichlalm (1,400 m.a.s.l.) in the Untersulzbachtal. The walk starts from there, first along a cattle drive way to the Aschamalm (1,630 m) and on through rough high-alpine terrain to the portal of the Untersulzbachkees glacier (2,300 m). The destination of the excursion is the special protected area Untersulzbachtal, one of the last wilderness areas in the Alps. To enjoy the route, you need to be fit enough to walk for six hours in rough terrain. There are no huts on this route, bring your own food and drink.

Around 17:00 to Mittersill (car park at the Nationalpark-Zentrum)

Some food and drink, warm and weatherproof clothing, alpine boots with a good profile and rigid sole are a must, headgear, sunglasses, sunscreen, binoculars recommended, trekking poles (if available)

max. 15 persons, min. 8 persons

Very demanding, old snow fields might have to be crossed, surefootedness required (slippery rocks and steep snow fields might have to be crossed)

If the weather does not allow this excursion to be held (e.g. new snow or extreme weather), an alternative excursion will be offered.



# Cryospheric research and dynamic processes in the changing landscape of the Obersulzbach Valley

Hans Wiesenegger, Hydrological Service - Land Salzburg

Mittersill - car park at the Nationalpark-Zentrum

07:50 for 08:00

By bus from Mittersill via Neukirchen past Seebach waterfall, Sattelkar landslide and the moraine from 1850 of Obersulzbachkees, then on foot to Oberer Keesboden (1,930 m) and on to recent proglacial lake Obersulzbachsee (2,300 m) along glacier trail and back (approx. 6 km) with views of glaciers, past and on-going dynamic landscape changes and explanations of the actual cryospheric study sites. To enjoy the route, you need to be fit enough to walk for three hours on high-alpine paths. On the way back possibility for a short lunch stop at Postalm (1,699 m).

Around 17:00 to Mittersill (car park at the Nationalpark-Zentrum)

Some food and drinks, warm and weatherproof clothing, alpine boots with a good profile and rigid sole are a must, headgear, sunglasses, sunscreen, trekking poles (if available)

max. 20 persons, min. 8 persons

Demanding, old snow fields might have to be crossed, surefootedness required (slippery rocks and steep snow fields might have to be crossed)

If the weather does not allow this excursion to be held (e.g. new snow or extreme weather), an alternative excursion will be offered in the area.

# Poster presentations

#### Bulent Acma,

#### Anadolu University, Eskisehir (TR)

Ecosystem and ecocity planning in the southeastern Anatolia region of Turkey

#### Susanne Aigner, eb&p Environmental Agency Ltd., Klagenfurt (AT)

National Park Certificate for Alpine pastures

#### ANL-Bayerische Akademie für Naturschutz und Landschaftspflege, Laufen (DE) and Amt der Salzburger Landesregierung, Salzburg (AT)

Alpine pastures active – new ways for biodiversity (film in German)

#### Arne Arnberger, BOKU University Vienna (AT)

Addressing challenges in managing recreation in protected areas in an international context: the international summer schools on natural resource and recreation management in protected areas

#### Sandra Aurenhammer, ÖKOTEAM - Institute for Animal Ecology and Landscape Planning, Graz (AT)

Dynamic processes as a key factor for biodiversity?

A zoological case study in the largest rockslip area of the Eastern Alps

#### Norman Backhaus, University of Zurich (CH)

Creation of value through tourism in the UNESCO Biosphere Reserve Val Müstair Parc Naziunal

#### Peter Bilovitz, University of Graz (AT)

A transnational lichen inventory of the Alps: a long overdue task

#### Carole Birck.

# Asters - conservatoire des espaces naturels de Haute-Savoie, Pringy (FR)

Monitoring of French altitude lakes in multi-stressors situations: focus on five lakes in Haute-Savoie

#### Emma Blackwell, BOKU University Vienna (AT)

Induction and spread of a spruce bark beetle outbreak in the Wilderness Area Dürrenstein, Austria

#### Vladimir N. Bolshakov, Russian Academy of Sciences, Ekaterinburg (RU)

Organization of environmental monitoring in protected areas

#### Sarah Burg, Swiss Federal Institute of Technology Zurich (CH)

Observer bias and its causes in botanical records on summits

#### Stefano Chelli, University of Camerino (IT)

Effects of extreme weather events on Apennines grasslands productivity

#### Emilio Chiodo, University of Teramo (IT)

Differences in development paths of tourism and agriculture within Abruzzo region protected areas

#### Agnes Demetz, University of Vienna (AT)

Effects of natural floodplain dynamics and vegetation structure on grasshopper assemblages of meadows in Donau-Auen National Park, Austria

#### Thomas Dirnböck, Environment Agency Austria, Vienna (AT)

Long-term ecosystem monitoring and research at LTER Zöbelboden -20 year anniversary (film in English)

#### Ursa Drofenik, University of Ljubljana (SI)

Mountain biking in protected areas in case of Triglav National Park

#### Ursula Eisendle, University of Salzburg (AT)

Micro- and meiobiota patterns in glacier-driven stream habitats

#### Nodar Elizbarashvili, Tbilisi State University (GE)

Main principles and results of landscape planning in new protected area in Central Caucasus, Georgia

#### Marianna Elmi, European Academy Bolzano -EURAC Research (IT)

Challenges for sustainable tourism management in an UNESCO serial world heritage site. The case of the Dolomites.

#### Rodney Garrard, CDE, University of Bern (CH)

Depicting community perspectives: repeat photography and participatory research as tools for assessing environmental services in Sagarmatha National Park, Nepal

#### Fulvio Genero, University of Udine (IT)

Griffon vulture monitoring in the Hohe Tauern National Park

#### Barbara-Amina Gereben-Krenn, University of Vienna (AT)

Cryptic bumblebee species of the Bombus Iucorum-complex in the Austrian Alps

#### Günter Gollmann, University of Vienna (AT)

Frogs in the city: problems of research and conservation of amphibians in Lobau (Vienna, Donau-Auen National Park)

#### Stanislav Gomboc, EGEA, Institution for Nature, Ljubljana (SI)

Research of Lepidoptera fauna as one basis for the biodiversity management in the Kozjanski Park

#### Joachim Götz, University of Salzburg (AT)

Sediment storage quantification and postglacial evolution of an inner-Alpine sedimentary basin (Gradenmoos Basin, Schober Mountains, Hohe Tauern National Park)

#### Patrick Gros, Haus der Natur, Salzburg (AT)

The Biodiversity Database of Hohe Tauern National Park as a basis for research and management: distribution of threatened species based on butterfly data

#### Arnulf Hartl, Paracelsus Medical University Salzburg (AT)

Health effects of alpine waterfalls

#### Sabine Hennig, University of Salzburg (AT)

Use of modern information and communication technology in large protected areas

#### Karin Hochegger, Büro für ökologische Landschaftsplanung, Bad Mitterndorf (AT)

Utilization history of alkaline fens in the Natura 2000 area Ödensee Salzkammergut new strategies for future management

#### Viktoria Igel, self-employed ecologist, Vienna (AT)

Status of peat lands in Upper Austria: a survey on vegetation with management plans for renaturation

#### August Kaiser, ZAMG Vienna (AT)

Trends of ozone and meteorological parameters at high Alpine sites

#### Sistri Kamal, Jagiellonian University, Krakow (PL)

Challenges in conserving private protected areas: where are the opportunities?

#### Anne Kasper-Giebl, Technical University of Vienna (AT)

Aerosol measurements at the Sonnblick Observatory. Online identification of long range transport of particulate matter

#### Bernadette Kastler, University of Vienna (AT)

The impact of Robinia pseudoacacia on vegetation and plant nutrient matter in Donau-Auen National Park

#### Andreas Kellerer-Pirklbauer, University of Graz (AT)

Relict rock glaciers as important aquifers in sensitive ecosystems: the example of the Natura 2000 protection area Niedere Tauern range, Styria

#### Günter Köck,

#### Austrian Academy of Science, Vienna (AT)

Research in protected areas funded by the Austrian Academy of Science

#### Christian Komposch, ÖKOTEAM - Institute for Animal Ecology and Landscape Planning Graz (AT)

Natural hazards — hazards for nature? Avalanches as a promotor of biodiversity. A case study on the invertebrate fauna in Gesäuse National Park

#### Gabi Kraller, University of Graz (AT)

Distributed water balance modeling in the Berchtesgaden National Park

#### Andrej Kranjc, Slovenian Academy of Sciences and Arts, Ljubljana (SI)

Scientific research of Škocjanske Jame caves (UNESCO world heritage) - from antiquity to modern times

#### Norbert Krouzecky, Vienna University of Technology (AT)

Ship-induced waves in the bank zone of the Austrian Danube in Donau-Auen National Park - experimental investigations

Ship-induced waves in the bank zone of the Austrian Danube in the Donau-Auen National Park - Test results

### Gordan Lukac,

#### Public Institution Paklenica National Park, Starigrad-Paklenica (HR)

The bird atlas of Paklenica National Park, Croatia

#### Tobias Luthe, University of Applied Sciences, Chur (CH)

Green tourism - opportunity and responsibility for protected areas

#### Gabriela Manea, University of Bucharest (RO)

Constraints and challenges in the creation and public use of protected areas within a city. Case study: Lake Vacaresti, Bucharest

# Theresia Markut, self-employed ecologist, Vienna (AT)

Carabid beetles (Coleoptera, Carabidae) in the Thaya valley

#### Nikolaus Medgyesy, University of Innsbruck (AT)

Monitoring of autochthonous brown trout (Salmo trutta f. fario L.) populations in different streams of Hohe Tauern National Park

#### Christina Nagl, University of Vienna (AT)

Owls in floodplain forests in Eastern Austria: habitat use and population density

#### Giorgi Nakhutsrishvili, Ilia State University, Tbilisi (GE)

A perspective on ecological corridor for maintaining healthy ecological processes in the Caucasus

### Georg Niedrist,

### University of Innsbruck (AT)

Spatial and temporal variation in chironomid assemblages in glaciated catchments of Hohe Tauern National Park

#### Sophie Nießner & Andrea Lamprecht, University of Vienna (AT)

GLORIA - tracing the fate of high mountain organisms in protected areas

#### Christina Pichler-Koban, E.C.O. Institute of Ecology, Klagenfurt (AT)

Society and protected areas in flux - more than hundred years of nature conservation in Austria, Germany and Switzerland

#### Jürgen Pollheimer, coopNATURA, Rum (AT)

Monitoring breeding birds in Thayatal National Park: point counts with distance sampling - a case study on selected songbird species

Abundance and habitat selection of two alpine songbird species in Hohe Tauern National Park

#### Stefan Preiner, WasserCluster Lunz (AT)

Development of an integrated modeling tool to assess the nutrient dynamics and trophic status of a decoupled floodplain along the Danube river in Austria

#### Michalis Probonas, University of Crete, Heraklion (GR)

Innovative actions against illegal poisoning in protected areas of Crete

#### Maja Rapp, Swiss National Park, Zernez (CH)

Biomass-mapping of Alpine grassland with APEX imaging spectrometry data

#### Walter Reckendorfer, WasserCluster Lunz (AT)

Metacommunity structure in a floodplain system: implications for conservation restoration

# Maik Rehnus,

Swiss Federal Research Institute WSL, Birmensdorf (CH)

Influence of tourism activities on mountain hares (Lepus timidus) and its consequences

# Poster presentations

#### Rainer Reiter, Federal Research and Training Centre for Forests, Natural Hazards and Landscape, Vienna (AT)

Soil inventory in forests of Wienerwald Biosphere Reserve

#### Jürgen Reitner, Geological Survey of Austria, Vienna (AT)

Reconstruction of a prehistoric past rock avalanche in the Hohe Tauern region: the Auernig sturzstrom

#### Barbara Riedler, University of Salzburg (AT)

EO-based habitat structure assessment in a transboundary Natura 2000 site

#### Herwig Ruprecht, BOKU University Vienna (AT)

Long-term monitoring of natural regeneration in natural forest reserves in Austria - results from the ELENA project

#### Rita Salvatore, University of Teramo (IT)

The role of protected areas for rural tourism: a depiction of Swiss and Italian cases

#### Christine Scheidegger, Regional Nature Park Gantrisch, Bern (CH)

Management and research in park Gantrisch of national importance

#### Verena Schiffleithner, University of Vienna (AT)

Neophytes in Thayatal National Park - distribution mapping and evaluation of management

# Ingrid Schmitzberger, coopNATURA, Rum (AT)

Vegetation monitoring of open habitats in Thayatal National Park – results of the first period

#### Lothar Schrott, University of Salzburg (AT)

Modeling Alpine permafrost distribution in the Hohe Tauern 1 region, Austria

#### Stefan Schütz, University of Innsbruck (AT)

Adequate indicators for environmental change in Alpine river systems, Hohe Tauern National Park. Preliminary results

#### Andreas Schwarzenberger, International Bearded Vulture Monitoring, Vienna (AT)

The Bearded vulture in the Alps the importance of protected areas and long-term monitoring

#### Bernd Seiser, Austrian Academy of Science, Vienna (AT)

Glaciological monitoring, Venedigerkees, Hohe Tauern, Austria

#### Herfried Steiner, Federal Research and Training Centre for Forests, Natural Hazards and Landscape, Vienna (AT)

Stand dynamics in Neuwald Virgin Forest

#### Anna Katharina Steinmetz, alpS Centre for Climate Change Adaptation Technologies, Innsbruck (AT)

Trade-offs of ecosystem services provided by mountain hay meadows under land-use change scenarios

#### Martin Stocker, Waldhuber, ÖAW – Institute for Mountain Research Man and Environment, Innsbruck (AT)

Six years of glacier mass balance on Mullwitzkees (Hohe Tauern) and Hallstätter Gletscher (Dachstein)

#### Kathrin Stürzenbaum, University of Vienna (AT)

Vertical stratification of xylobiontic beetles in floodplain forests of Donau-Auen National Park and potential effects of box elder control measures

#### Mojca Stubelj Ars, University of Nova Gorica (SI)

Assessment of environmental education indicators in Triglav National Park, Slovenia

#### Leita Tschanz, Aix Marseille University (FR)

Socio-ecological systems: towards a global approach of biodiversity observation in a regional natural park of alpine territory

#### Roman Türk, University of Salzburg (AT)

The role of Hohe Tauern National Park as a Noah's Ark for threatened lichens

#### Iuliana Vijulie, University of Bucarest (RO)

Forest management in Piatra Craiului National Park between economic benefits and ecosystem services

#### Ivan Voloscuk, University of Matej Bel, Banská Bystrica (SK)

From research of the Carpathian beech virgin forests to the World Heritage

#### Matthias Wagner, European Academy Bolzano -EURAC Research (IT)

Developing sustainable tourism in sensitive mountain areas. Challenges for the sustainable management of leisure motivated mobility in the UNESCO world heritage site of the Dolomites

#### Matthias Weiss, Czech Academy of Science, Ceske Budejovice (CZ)

The influence of tree species, stratum and forest management - a case study in the Schwäbische Alb, Germany

#### Hans Wiesenegger, Hydrological Service Salzburg (AT)

Long-term monitoring - an obligatory requirement for understanding changes in the water cycle of Hohe Tauern National Park

#### Martin Wiesmair, University of Giessen (DE)

Remote sensing signals of erosion and plant diversity in Kazbegi National Park (Greater Caucasus, Georgia)

#### Martin Zimmer, University of Salzburg (AT)

Soil macrofauna in undisturbed areas using altitude as a proxy for climate change

#### Carina Zittra, Donau-Auen National Park GmbH, Orth a.d. Donau (AT)

Species inventory, ecology and seasonal distribution patterns of culicidae (Insecta: Diptera) in Donau-Auen National Park

### Awardees of the Nationalparks Austria Science Award 2013

#### Magdalena Bernsteiner, University of Salzburg (AT)

Extracurricular Environmental Education in the Hohe Tauern National Park

#### Barbara Dillinger, University of Vienna (AT)

Strategies of wetland restoration in the Waasen/Hanság (northern Burgenland)

#### Andreas Eckelt, University of Innsbruck (AT)

Living forests and dead wood - Saproxylic beetle communities in two suspected virgin forest areas in Kalkalpen National Park (Upper Austria)

#### Sarah Friembichler, University of Salzburg (AT)

Potential habitats of the European Wildcat (Felis silvestris silvestris, Schreber 1777) in Austria - a basis for further steps in conservation

#### Verena Gfrerer, University of Salzburg (AT)

Examinations on alpine brown trout populations (Salmo trutta f. fario) in the province of Salzburg (Austria)

#### Andrea Grabenhofer, University of Vienna (AT)

Ecophysiology of filamentous green algae in astatic saline-alkaline ponds

#### Agnes Hahn, BOKU University Vienna (AT)

Comparative fish stock assessment at the Johnsbach brook and the Enns River within the course of the EU LIFE-project "Conservation strategies for woodlands and rivers in the Gesäuse Mountains"

#### Jürgen Hengsberger, Technical University Munich (DE)

Bird communities in distinctively mixed alpine forests of the Ennstal Alps in the Gesäuse National Park

#### Franz Hölzl, University of Vienna (AT)

Population Density, Habitat Preferences and Nest Predation of the River Warbler (Locustella fluviatilis) in Donau-Auen National Park, Eastern Austria

#### Christian Kondler, Pädagogische Hochschule des Bundes Linz (AT)

Educational opportunities of Austrian National Parks as a sustainability-oriented adult education — comparative analysis of Gesäuse National Park and Kalkalpen National Park

#### Zsófia Krasznai, BOKU University Vienna (AT)

Analysis of potential breeding habitat for the White-tailed Eagle (Haliaeetus alpicilla) in Austria

#### Henriette Krebs, University of Vienna (AT)

Comparison of herbivore communities on the native Field Maple Acer campestre (L.) and the neophyte Box Elder Acer negundo (L.)

#### Franziska Lörcher, University of Zurich (CH)

Low genetic diversity of the reintroduced bearded vulture (Gypaetus barbatus) population in the Alps calls for further releases

#### Wolfgang Mayer, University of Salzburg (AT)

Epiphytic lichen communities in Kalkalpen National Park, Austria, Upper-Austria

#### Thomas Moitzi, University of Graz (AT)

Characterization of the six recent woodpecker species in Kalkalpen National Park and the development of a habitat-model in GIS to evaluate the living space of woodpeckers in the area of the National Park

#### Michael Plank, University of Vienna (AT)

Use of the forest canopy by bats in temperate forests of Central Europe

#### Jakob Pöhacker, BOKU University Vienna (AT)

Modelling of Habitat Preferences of water pipits (Anthus spinoletta spinoletta) in Gesäuse Nationalpark using Remote Sensing and GIS

#### Ronald Pöppl, University of Vienna (AT)

Investigating the role of humans as (dis)connecting agents in fluvial systems - new concepts and applications for fluvial geomorphology and landscape research

#### Florian Ritter, BOKU University Vienna (AT)

Summer mountain tourism in climate change: Scenarios and need for action using the example of the high Alpine trail network

#### Matthias Schmidt, University of Vienna (AT)

An assessment of population status and trends of the European Kingfisher in the Donau-Auen National Park and in eastern Austria

#### Claudia Schütz, University of Vienna (AT)

Feeding behaviour of Ruffs during spring migration at a stopover site of international importance in Eastern Austria



#### Information

#### Organizer:

Hohe Tauern National Park Administration Salzburg, Gerlos Straße 18/2, 5730 Mittersill, Austria, www.hohetauern.at

On behalf of Nationalparks Austria, Federal Ministry for Agriculture, Forestry, Environment and Water Management, Stubenring 1, 1012 Vienna, Austria, www.nationalparksaustria.at

The 5th Symposium for Research in Protected Areas 2013 in Mittersill is carried out in the frame of the Nationalparks Austria Project "LEGZU – Leitlinien, Grundsätze, Zusammenarbeit" which is funded by the EU and the Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management.













#### In cooperation with:

Since the 3rd Symposium for Research in Protected Areas 2005: Alpine Network of Protected Areas (ALPARC), 256, Rue de la République, 73000 Chambéry, France, www.alparc.org



International Scientific Committee on Research in the Alps (ISCAR), Schwarztorstraße 9, 3007 Bern, Switzerland, www.iscar-alpineresearch.org



Institute for Interdisciplinary Mountain Research (IGF), an institute of the Austrian Academy of Sciences (ÖAW), Technikerstr. 21a, Otto Hittmair-Platz 1, 6020 Innsbruck, Austria, www.mountainresearch.at, www.oeaw.ac.at



At the 5th Symposium for Research in Protected Areas 2013: The Danube River Network of Protected Areas (DanubePARKS), Nationalpark Donau-Auen, Schloss Orth, 2304 Ort/Donau, Austria, www.danubeparks.org

# **DANUBE**PARKS

International Association for Danube Research (IAD), WasserKluster Lunz - Biologische Station GmbH, BOKU, Max Emanuelstr. 17, 1180 Wien, Austria, www.iad.gs



#### Funding:

National Park Fund of the Federal Ministry for Agriculture, Forestry, Environment and Water Management, Vienna, Austria, www.lebensministerium.at

#### GEFÖRDERT AUS MITTELN DER EU UND DES BUNDES









Hohe Tauern National Park Fund Salzburg, Gerlos Straße 18/2, 5730 Mittersill, Austria

#### Concept:

International Scientific Board:

Members of Nationalparks Austria, ALPARC and ISCAR made up an independent scientific committee which approved and classified the papers received and set up the final thematic sessions, the keynote speakers and the full programme of the symposium.

Dr. Günter Köck, Chair, Austrian Academy of Science, Vienna, Austria

Dr. Axel Borsdorf, IGF Institute for Interdisciplinary Mountain Research, Innsbruck, Austria

Dr. Valerie Braun, IGF Institute for Interdisciplinary Mountain Research, Innsbruck, Austria

Dr. Leo Füreder, University of Innsbruck, Institute of Ecology, Austria

Dr. Alois Herzig, guest lecturer, University of Vienna, Department of Limnology, Austria

Dr. Peter Huemer, Tyrolian Federal State Museum Ferdinandeum, Innsbruck, Austria

 $\label{eq:decomposition} \mbox{Dr. Guido Plassmann}, \mbox{Task Force Protected Areas AC / ALPARC}, \\ \mbox{France}$ 

Dr. Wolfgang Scherzinger, ecologist, guest lecturer, University of Salzburg, Austria

Dr. Thomas Scheurer, ICAS/ISCAR, Bern, Switzerland

Dr. Brigitte Scott, IGF Institute for Interdisciplinary Mountain Research, Innsbruck, Austria

Dr. Dominik Siegrist, University of Applied Sciences Rapperswil & CIPRA International, Switzerland

Dr. Bernd Stöcklein, University of Applied Sciences Weihenstephan, Landschaftsarchitektur Faculty, Germany

Dr. Michael Vogel, Berchtesgaden National Park, Germany and President of ALPARC

Dr. Thomas Wrbka, senior lecturer, University of Vienna, Faculty of Life Sciences, Department of Conservation Biology, Vegetation and Landscape Ecology, Austria

Mag. Kristina Bauch, Hohe Tauern National Park Salzburg, Austria

#### Overall project management:

Kristina Bauch, Hohe Tauern National Park Administration Salzburg, Gerlos Straße 18/2, 5730 Mittersill, Austria Tel.: +43 (0)6562 40849, Fax: +43 (0)6562 40849 40 E-mail: nationalpark@salzburg.gv.at

#### Conference language:

English

#### Proceedings:

The conference volume will be distributed punctually at the Symposium.

#### Registration:

Online via www.hohetauern.at/symposium2013

#### Registration deadline:

Conference, excursion: 22 May 2013

#### Registration fee:

Please note that there is no conference fee but a charge for lunch and coffee of EUR 30 for one conference day or EUR 50 for the full conference. Food during the excursions is not included in the price. Lunch will be provided at the Nationalpark–Zentrum Mittersill.

Upon receipt of your online-registration we will send you the registration conformation together with a payment form.

#### Cancellation fee:

There is no refunding of costs.

#### Other expenditure:

Participants have to organize and pay for their own travel, accommodation and all meals not covered by the conference.

#### Contact for accommodation and arrival:

#### Christine Eberl

Code: "Symposium 2013" Mittersill plus Tourismus

Stadtplatz 1, 5730 Mittersill, Austria

Phone: +43 (0)6562 4292 Fax: +43 (0)6562 5007

e-mail: <u>christine.eberl@mittersillplus.at</u>

e-mail: welcome@mittersill.info

Web: www.mittersill.info

#### Arrival:

#### By train:

www.oebb.at (train schedule information Austrian Federal Railways including the route per bus from Kitzbühel to Mittersill) The train route from Kitzbühel to Mittersill makes quite a detour, so we recommend instead to take the train to Kitzbühel and change there into the bus for Mittersill.

<u>www.vvt.at</u> (Bus schedule Kitzbühel - Mittersill available from Verkehrsverbund Tirol VVT)

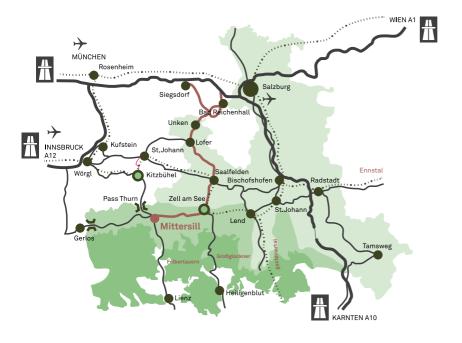
www.sbb.ch (Train schedule information Swiss Federal Railways) Due to construction work the trains between Switzerland and Austria via Buchs-Feldkirch will run with altered stops and schedule during June 2013. Please consult the latest schedule.

#### By car:

#### Destination:

Nationalpark-Zentrum, Gerlos Straße 18, 5730 Mittersill, Austria On <a href="https://www.hohetauern.at/symposium2013">www.hohetauern.at/symposium2013</a> you will find the already linked google map.

In Mittersill everything is within walking distance.



···· Rail route

Arrival without car toll

Motorway

Nearest rail stations

Ferienregion Nationalpark
Hohe Tauern

Nationalpark Hohe
Tauern



