

Director of the Berchtesgaden National Park, Michael Vogel, is working to network animals, plants and people in the Alps.

## NATURE ABHORS BORDERS

ECOLOGICAL CONTINUUM AND ECONNECT

**CIPRA sees itself as something of a networker. And this applies to nature conservation as well. It brings officials, local authorities and scientists together, regardless of national borders. After all, animal and plant migrations don't stop at border barriers either.**



“If you want to get two farmers to sit down at a table, you'll have to slay one of them first”, says Josef Hohenwarter, quoting a folk tune from his home town of Weissbach in the Salzburger Land as he pushes a vase of cowslips into the centre of the table as if to symbolise the defunct farmer. As a master baker, the 42-year-old has the irony it takes to find the brutal saying funny; but as the mayor of Weissbach he knows the truth at its core – especially if the two farmers are meant to be talking about nature conservation.

The man sitting opposite him, Michael Vogel, Director of the Berchtesgaden National Park, also laughs at the saying. Both men have agreed to meet at the Gasthof Hirschbichl right on the German-Austrian border, a rustic Stube with chequered tablecloths and walls bristling with antlers. A sandstone obelisk in front of the Gasthof marks the border between two states and also the border between a National Park, in which nature is left entirely to its own devices, and the Alpine pastures tended by Weissbach's farmers.

Josef Hohenwarter and Michael Vogel have ambitious plans: their respective territories are at the heart of the 2,000 km<sup>2</sup> pilot region of Berchtesgaden-Salzburg, in which a radical new approach in Alpine nature conservation is to be adopted. The experiment goes by the name of “Econnect” and is being subsidised by the EU in seven pilot regions (see box at page 7). Econnect aims to find ways in which a “consistent ecological continuum” might be achieved in the Alps.

The fundamental concept is that it's not enough to put individual areas under protection; instead, animals and also plants must be allowed to migrate freely between the protected areas – across borders and artificial man-made barriers such as roads, fields and settlements. Otherwise the protected areas remain islands that cannot ensure the survival of the species. Biodiversity declines as a result and, along with it, the stability of the entire ecosystem.

Michael Vogel and Josef Hohenwarter have hatched many a project together. The first was the route of the “Alpine Experience

Bus”, which takes visitors through the National Park into the Salzburger Land, and also calls in at Gasthof Hirschbichl. The second was an Alpine cheese dairy featuring a small exhibition. The contact between people across the border works well. Now it's time for the animals to follow suit. “We know far too little about the migration of amphibians, reptiles and insects across the green border”, says Michael Vogel. “Where are the barriers? Where can we restore ecological corridors?”

Visitors to the Berchtesgaden National Park are astonished that in recent years they have seen so few butterflies. And biologists who on the German side have come across decades-old droppings from horseshoe bats have been searching in vain for a current population. “Why aren't there any horseshoe bats flying across from the Salzburger Land any more?” asks Michael Vogel.

When flying from their overnight location to their hunting ground, bats use the vegetation that grows along streams and rivers to find their way. They emit ultrasound waves that bounce off trees

and shrubs. But if farmers have been clearing the trees and shrubs along river banks to extend their arable land, the bats lose their bearings. They are forced to restrict their flying and hunting radius. In extreme cases the connection between two bat populations may be broken, and each population is forced into incest and ultimate decline. So it's of little use if the overnight location and the hunting ground are situated in two different protected areas.

Amphibians need pools and lakes for spawning in summer and undergrowth for hibernating in winter. These two biotopes have to be close to each other and not separated by busy roads. Hedgehogs and red-backed shrike love the hedges and bushes that line the edge of forests. When they migrate, they carry pollen with them on their spines and feathers, thereby helping plants to propagate. Nature needs bridges and corridors.

The pilot region of Berchtesgaden-Salzburg is ten times the size of the National Park, which is Michael Vogel's responsibility. His task is to motivate the municipalities to co-operate, along with



land owners, the Provincial Offices for Environmental Protection on both the German and the Austrian side, the forestry commission, environmental associations, and the population.

And of course the farmers of Weissbach. Without their consent, for example, biologists cannot walk across Alpine pastures and count butterfly numbers. And yet particularly in Weissbach, biologists are looking for answers to the question of how well these ecologically vital meadows in the border region are connected and where heavily fertilised meadows represent a barrier: many plant species do not thrive on fertilized soil, and so the butterflies stay away.

If you ask Josef Hohenwarter why getting permission for a butterfly census might be a problem, you'll get an amused smile. Six years ago biologists made their first attempt. But the farmers of Weissbach were not amused: "We're not going to let these ecologists turn us into a zoo!" There were even rumours of a threat of expropriation. But then, at the second attempt at the beginning of June, the farmers instantly gave their permission.

So what had happened? In two dozen meetings Josef Hohenwarter had managed to convince his farmers that they should upgrade their meadows to be legally recognized as the "Weissbach Nature Park" and as a result get better prices for their milk. In order to obtain nature park recognition, farmers may only mow

their meadows once a year; they must also dispense entirely with fertilizer, and protect ponds from cattle hoofs. Indeed, Weissbach was recognised as a Nature Park in 2007. Since then the farmers have been selling their milk for 85 cents a litre – three times more than the competition in the valley.

Josef Hohenwarter grins broadly as he sips his coffee at Gasthof Hirschbichl: "Now there are waiting lists of farmers wanting to be included in the Nature Park. We have won their support." And with it the basis for new projects. The region is to become barrier-free. That includes fish ladders at weirs, underpasses for amphibians under a busy road, and crossing points for deer at green bridges.

It's 11 am. Michael Vogel has to leave; he gets into his VW bus and drives down a steep track through spruce forests littered with fallen tree trunks rotting away. Mist shrouds the summit of the Watzmann, soaring high above the Königssee. At Aschauerweiher a dozen rangers dressed in hunting green are already waiting for him. One of their duties is to guide groups of visitors through the National Park. As part of Econnect they are to be shown how they can help to collect data on the occurrence of amphibians and reptiles in the course of their hikes. A biologist from Bavaria's programme for the protection of species „Artenhilfsprogramm Kreuzotter“ introduces the rangers to the habits



**Left and above:** Where do snakes, butterflies and salamanders like to live? A game of hide and seek teaches rangers how to gather data on the incidence of amphibians and reptiles for Econnect.

of snakes, butterflies and salamanders, then hides laminated photos along a stream, and lets the group search for themselves. "The yellow-bellied toad likes reeds," he tells them, "and the Apollo butterfly is fond of the blossoms of the Sedum album". The rangers move out and go in search of the photos. As they will do later when out and about, their task is to enter what they find on a form entitled "Unknown diversity in the Berchtesgaden National Park", together with the co-ordinates and a precise description of the site of the find.

In the late afternoon Michael Vogel returns to Berchtesgaden and drives through the narrow streets to the National Park's administrative building, a bright structure with wonderful views over the rooftops and gables of Berchtesgaden's houses, across to the slopes of the National Park. The skeleton of a golden eagle sits regally on Michael Vogel's desk. Two members of the National Park staff entrusted with the Econnect project enter and report on a conference where representatives of the seven pilot regions exchanged their experiences two years after the start of Econnect. The unanimous feedback is that the most difficult part of the project is getting the local partners to link up. Michael Vogel is not surprised by the findings. "We need the Alpine platform to be able to come up with a project such as this in the first place



**Right:** German Michael Vogel (left) and Austrian Josef Hohenwarter discuss Alpine nature conservation at the Gasthof Hirschbichl on the German-Austrian border.

and get it financed," he explains. "And then we have to implement it locally with our partners."

The foundations for the political and financial support of Econnect are to be secured through the Alpine Convention. The Ecological Network platform provides a forum for nature conservation authorities in all the Alpine states, plus organisations such as CIPRA. "In the past all we saw was our National Park. CIPRA made us realise the benefits of cross-border co-operation throughout the entire Alpine region", says Michael Vogel. "What we particularly appreciate are the incentives from best practice examples from other pilot regions and the scientific data and methodology." Econnect's influence is already being felt beyond the pilot regions. Michael Vogel regularly meets nature conservationists from the nearby Chiemgau Alps and the Tauern range. He is also preparing for a trip to South Korea. The environmental commission there is fascinated by the idea that it is not so much a matter of protecting individual nature reserves, but of establishing linking pastures, bushes, wetland areas, ponds, roof trusses, etc. "For the Koreans it's an entirely new concept".

**Tilman Wörtz (text) and Heinz Heiss (photos)**  
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**NETWORKING WORKS** — Since 2002 CIPRA, together with the WWF's Alpine Programme, the Alpine Network of Protected Areas (alparc) and the International Scientific Committee on Research in the Alps (ISCAR), has advocated the networking of habitats in the Alps. The "Ecological Continuum Initiative" is designed to enhance these habitats and facilitate exchanges between them. To this end the four partners not only encourage projects, but also support and network their activities. In 2009, the initiative was funded by Switzerland's MAVA Foundation for Nature to the sum of CHF 384,000 (EUR 269,000). Econnect implements the ideas of the Ecological Continuum Initiative in practical projects, in seven pilot regions across the Alps. The project is being co-financed by the European Union from September 2008 until August 2011 to the sum of CHF 4.86 million (EUR 3.2 million). The Alpine Convention's Ecological Network Platform establishes networks among those political bodies that are of relevance to the ecological continuum, including CIPRA.

[www.econnectproject.eu](http://www.econnectproject.eu) | [www.alpine-ecological-network.org](http://www.alpine-ecological-network.org)