

The wolf is back

Austria to lead alpine convention

Tropical fruits and fish in the Alps?

WWF Ecoregion Conservation Plan

PVC Foil to Protect Alpine Glaciers?

Patching up the symptoms instead of curing the disease

24th March, 2005

The Swiss town of Andermatt has decided to try and protect its glacier, hard hit by global warming, with a foil made of PVC. Andermatt, which is located close to the Gotthard mountain pass, relies heavily on ski-related tourism for most of its revenue. The melting of the glacier is therefore first and foremost an economic problem.

The WWF European Alpine Programme expresses strong reservations about the "Andermatt solution".

It's perfectly understandable that Alpine towns like Andermatt try to cope with the symptoms of climate change. But we should not forget about the disease itself. Tackling the consequences of global warming at local level is tantamount to emptying the sea with a teaspoon. The Andermatt proposal shows how locally expensive and unsustainable global warming can be!

There's also a certain amount of irony in the "solution" put forward by the Andermatt authorities: The production of PVC is linked to the very fossil fuels that are responsible for the global greenhouse effect causing the accelerated global warming we are witnessing. And although the use of petroleum for PVC production is comparatively moderate and the energy content comparably lower than in other types of plastic, PVC production implies the use of chlorine, with toxic by-products and dioxin emissions that represent a huge environmental and health hazard.

The wane of the ice giants

Throughout the Alps glaciers are disappearing fast. Since 1850 the Swiss Alps have lost more than 100 glaciers. The surface of the remaining Alpine glaciers

has shrunk by a third and their volume is half of what is was 150 years ago. One example speaks for all: the Tschierva Glaciers, in Engadin, Switzerland has receded by more than 1,100 metres in the last century. In the last 40 years most Alpine glaciers have lost a considerable part of their ice mass: Hintereisferner Glacier in Austria, the Gries Glacier in Switzerland and the Sarennes Glaciers in France have each lost 14 metres in thickness from 1960. No PVC foil can stop that.

The melting of glaciers has ominous implications outside the Alpine region as well. The Alps are Europe's freshwater reservoir. The disappearance of Alpine glaciers constitutes a clear and current danger to a lot of Europeans, not only economically but also in terms of health and geopolitics (water shortage is already fuelling political tensions all over the world).

The 22nd March 2005 marked the beginning of the UN-declared decade of water. The melting of glaciers certainly does not represent a very good omen for the future of the world's freshwater resources. In the last two decades 10 to 20 percent of all Alpine ice has been lost due to global warming. During the exceptionally hot and dry summer of 2003, 10



percent of the total ice volume of Alpine glaciers melted. We are left to wonder if there will be any glaciers left when the Water Decade ends in 2015. 70 percent of the world's freshwater reserves are stored in glaciers in the form of ice. Less glaciers, therefore, will mean less drinking water.

The problem is in no way only a European one.

A quick fix?

There's no way all this can be fixed with the help of PVC foils. Or by any local, partial measures. In the short run, such "solutions" may have the potential to boost domestic GDP, but in the long run they don't make any economic sense. The implementation of effective climate protection measures will not only reduce global warming but will also bring about huge economic advantages. Useful sanctions ought to be enforced in order to stop the emission of greenhouse gases, which are the primary cause of the current warming, to increase energy efficiency and to reduce the consumption of fossil fuel energy sources.

The Andermatt story shows quite clearly to what lengths local communities will have to go in order to protect themselves from the economic consequences of inaction on the climate front. That is not to mention human consequences in terms of natural disaster risks (landslides, flooding, water shortage, disruption of ecosystem...)





achieve this results, by the year 2050 the global emission of greenhouse gases must be curtailed by more than 30 percent.

Real solutions take time and commitment

Despite the sensitivity of Switzerland's public opinion to climate change and its impact, the Swiss government decided on 22nd March 2005 that the huge increase of traffic (plus 8 percent of CO2 emissions since 1990) will not be tackled. A CO2 levy that should have been introduced on gasoline and diesel was replaced by a plan to buy CO2 certificates from abroad. Considering the CO2 emissions from imported goods, the per capita emissions in Switzerland are over 10t CO2 per year. The CO2 law that requests emission reductions of 10% by 2010 (compared to 1990) will not be fulfilled through domestic reductions. Apart from a CO2 levy other economic instruments should give incentives to invest in energy efficiency, give preference to efficient products and support the switch from fossil to renewable energy sources.

Developed countries have to take responsibility and act accordingly. Or else, what we will be stuck with is a very large, very useless PVC foil.

Please read update on the Andermatt solution on page 12

Strong commitment for water

Mr Joseph Pöll, Austria's Minister for the Environment said that Austria will focus mainly on the approval of a freshwater protocol, on traffic issues and on the completion of a status of the Alps report. Mr Pöll presented last month Austria's commitment as holder of the rotating presidency of the Alpine Convention.

The minister of the environment has drawn attention to the all-important role the Alps play in Europe's hydrological budget and on problems arising from conflicting claims on water resources. The EU Water Framework Directive provides an important tool for cross-boundary protection of waters. However not all the Alpine Convention signatory states are also EU members. Therefore, said Mr Pöll, "we see the need for a legal framework involving the Alpine Convention signatories and we will work towards that goal".

Mr Pöll's statement meets long-standing demands by CIPRA (the International Commission for the Protection of the Alps) and other environmental organiza-



Tirol, Austria.River in winter. Lech valley, near Forchach, Tirol, Austria



Swiss made caviar?

Tropical fruit and warm sea fish in the Alps? It's apparently what's going to happen pretty soon in the Bern Plateau region of

Kander river. The Swiss Federal Office for the environment has stated that in the future the water from the tunnel will have to be artificially cooled before being disposed of.



Switzerland, where a project called "Tropenhaus mit Aquakultur Frutigen" (roughly "Tropical House and Aquafarm Frutigen") in currently underway. The idea is simple but ambitious: using warm water from the new Loetschberg tunnel construction site for the production of tropical fruit and the breeding of warm water fish. At the mouth of the tunnel, near the small town of Frutigen, the tunnel excavation site discharges between 150-200 It/second of warm water (with temperatures between 18° and 20° Celsius).

Until now that water has been dumped into the nearby flowing

That's where the Tropenhaus project comes in: instead of expensively cooling off water from the mountain, the promoters intend to use it for the production of tropical fruits and fish.

The main elements of the new project will be a greenhouse for tropical plants and outdoor breeding tanks, for the production of edible fish, mainly sturgeon. The total **investment should be around €10 million**. The promoters promise that the production of tropical fruits and fish in the Alps will be in line with biological farming requirements and will be environmentally sustainable. If funding is ensured, work should start as early as mid 2006.

Source: Alpmedia

Slovenia's eolic plant is short-winded



Slovenia's Environment Agency has yet to approve the construction of the country's first wind power plant. The old Slovenian government had green-lighted the project, in the face of strong environmental opposition, before being voted out of office in the October 2004 elections.

The site where the new plant ought to have been built is situated on a high plateau inside Sne nik Regional Park, in the vicinity of the Croatian border. It is located in a karstic area of high naturalistic value. The numerous plant and animal species and its EU significant habitats have earned the region a nomination for the inclusion in the Natura2000 network.

Monte Rosa: Italy's highest cable car will affect protected site

By 2006 Italy's highest cable car will be built from the Passo dei Salati (2'971 metres above sea level) with the Cresta Rossa (3'660 metres). It is part of a "ski passageway" from Alagna (Piedmont) to Gressoney (Aosta Valley). The cable car itself will not serve skiers (it's way too high for that) and will be there mainly for off-piste skiers and for "Sunday mountaineers".

Italy's Mountain Wilderness association has voiced its concern about this new structure whose economic viability is far from ensured - not to mention the ecological impact. The area where the new cable car will be built is included in a SIC site (Community Interest Sites) and falls under the protection of the Flora-Fauna-Habitat Eu Directive.

Source: Cipra Italy

More information: Mountain wilderness Italy

www.mountwild.it



Austria to scrap environmetal protection?

Impact assessment à la carte

From now on Austrian law will not prescribe an environmental impact assessment (EIA) for some categories of projects as it did so far. The EIA will be replaced with a simpler, faster procedure aimed at assessing the specific project. On the base of this "quick and dirty" evaluation, the states' governments will be free to decide whether or not an environmental assessment is needed. This new procedure will not permit environmental organizations and public interest associations to appeal or object: only directly concerned municipalities will be entitled to start legal action against such projects.

a serious blow to what was so far an important legal tool for the protection of the environment. They accuse the governing coalition of trying to create ad hoc legislation to serve economic interests and of pursuing political patronage and favouritism.

With the new amended law controversial projects (e.g. the development of new tourist areas on the Kaunertal Glacies in Tyrol) will be green-lighted.

The new law is incompatible with EU legislation stating that all associations of public interest must take part in procedures affecting the environment. An



Among the projects for which an EIA is not lawfully required anymore are recreational parks, sports facilities, golf courses, motor-racing tracks and test tracks.

Opposition parties and environmental organizations view this amendment as

alliance of Austrian environmental organizations has filed a complaint to the European Commission against the Austrian government's decision.

Source: Alpmedia



Switzerland and the Wolf

By Mark Schulman

"If I ever came across a wolf, I would shoot it," a Swiss hunter from the Italian-speaking canton of Ticino said point-blank. "They are cold, killing machines that threaten farmers and their livestock."

It is attitudes like this which first led to the wolf's extinction in Switzerland some 100 years ago. Despite continued persecution, the European wolf (*Canis lupus*) is showing signs of a come back as several have sneaked across the border in recent years from Italy.

The presence of a single male wolf was first spotted in the Swiss canton of Valais in 1995 (and reportedly killed in 1996). Since then there have been wolf traces and other sightings in the south-eastern cantons of Graubünden and Ticino. No breeding has so far been recorded, but the first female sighting came in July 2002 along the Swiss-Italian border near Valais.

tection in Italy in the 1970s — resulting in increased wolf populations (today, there are about 600 wolves in Italy) — some have been forced to look for greener pastures. And, nothing is greener than the alpine slopes of Switzerland.

"We welcome this natural recovery in Switzerland," said Doris Calegari, a large predator expert with WWF Switzerland. "Wolves are one of the alpine region's top three predators, along with the brown bear and lynx. The fact that that they have returned is an indicator that the habitat is much healthier than it was in the past."

There were once hundreds of wolves living throughout Switzerland, but years of population growth, industrialization and forest conversion for agriculture and logging saw their habitat encroached upon. The loss of mountain forests, coupled with uncontrolled hunting, also resulted is the reduction of the deer population, the wolves' main prey. With little game left in the



A wolf's paradise

Wildlife experts believe that there are up to six wolves in Switzerland, originating from packs in the Abruzzo region of central Italy, some 600km away. Because of increased wolf pro-

Alps, large carnivores turned to domesticated animals, like sheep and goat, for their meals, often bringing them into conflict with farmers who saw them as a threat to their livestock. Seen as dangerous competitors, the wolf and the lynx were exterminated in the Alps.

Today, however, mountain forests have recovered, and with it an abundance of herbivores, thanks to more protected areas and better land management. Switzerland is now a true wolf 'paradise' with large populations of roe and red deer, marmots and chamois (horned antelope). They never lost their taste, though, for easily accessible livestock, which often graze without protection in the high alpine meadows.

"Wolves are opportunists," said Joanna Schoenenberger, WWF-Switzerland's European Alpine Programme Officer working on wolf issues in Ticino. "Yes, they will go after sheep, but there is now enough of a deer population to keep them happy."

Debunking the myth that wolves hunt for 'fun' and not only for food, a recent camera trap showed a wolf in Ticino returning to a deer it killed the night before.

"Mass killing by wolves is extremely rare," added Calegari. "Even when going after livestock, the loss of just a few animals is more common.

According to the Swiss-based KORA Carnivore Research Centre, 44 sheep were reportedly killed in Switzerland in 2004 by a large canine out of some 250,000 grazing sheep. The numbers are significantly lower than 2000 when 105 sheep were killed. From 1998 to 2003, 456 sheep and goats have been compensated as wolf kills.

However, not all livestock attacks are the work of wolves, but by their next of kin. The European wolf is a bit smaller and leaner than its North American counterpart, and can easily be confused with a large dog. In Ticino alone there are about 80 goats and 200 sheep killed by dogs each year. Despite the figures, farmers and hunters are still quick to blame wolves for their losses.

"Wolves present a problem, especially as there are lots of sheep which graze without shepherds," said Marco Mondada, President of the Ticino Hunters Federation. "Farmers' interests should not be put at unnecessary risk by animals which can be so destructive. They must be managed."

Although the wolf is legally protected under Swiss law, as well as under the 1979 Bern Convention on the



Who's afraid of the big, bad wolf?

Not everyone has welcomed the predator's reappearance. Since crossing into the Swiss Alps from Italy, wolves have been blamed for hundreds of attacks on sheep and goats. In spite of compensation for losses by the government, resistance against the wolf returning to Switzerland is strong, especially among sheep farmers and hunters.

Conservation of European Wildlife and Natural Habitats, farmers and hunters have in a number of instances won the support of local government to go after the few existing wolves.

Regulations were introduced in 2001 permitting the shooting of any wolf believed to have killed at least 50 sheep over a four-month period, or 25 in a single month. The minimum has

now been lowered to 35 sheep over a four-month time frame, and may continue to be lowered if wolf attacks continue. But the law is not totally on the side of wolf hunting. WWF recently won the right from the Swiss Federal Supreme Court to oppose decisions made by cantonal authorities in Valais to shoot a female wolf. WWF is now appealing the Valais cantonal court to overturn the decision.

breed suitable for livestock protection. Maremmano-Abruzzeses are also being used.

"These guard dogs are the best possibility of reducing wolf attacks. They work because they become attached to the sheep starting at birth and instinctively defend their herd."

Although not 100 per cent foolproof,



Wolf depredation may occur at any time during the year, but most attacks tend to take place in July and August when sheep are left unattended for long periods of time high up on the alpine pastures. Some pastures can be located at more than 2,500m and spread out over several square kilometers. Last summer, Giacomo Cominelli, a shepherd of 40 years, saw his large flock of sheep attacked five times. Over ten sheep, including lambs, were killed, and many more injured.

"It's a terrible thing to lose one's sheep, not just from a financial point of view, but emotional as well," Cominelli said. "If I wasn't a shepherd I probably would be for the wolf, but the sheep are my livelihood and I need to protect them the best I can. Killing a wolf would solve a lot of problems, but I think I would have a dilemma killing it myself."

Send in the dogs

Fortunately, Cominelli has not been quick to take up arms like some of his colleagues, and has been open to several alternatives supported by WWF and local government, including the use of specially-trained livestock guard dogs.

"The use of guard dogs is something shepherds haven't used in generations in Switzerland," said Alberto Stern, a veterinarian outside of Bellinzona who raises Great Pyreneans, a large dog there is evidence that they have reduced livestock loss in some areas, not just against wolves, but also against fox and raven, who also prey on small lambs. According to Stern, there are about 70-80 dogs in Switzerland being used by shepherds for this purpose.

Trying to diffuse the growing humanwildlife conflict, WWF's European Alpine Programme initiated a livestock guard dog project to help those being affected by the wolf attacks.

"When we saw the problems farmers were having with their sheep, we decided to take measures to help protect them," Schoenenberger said. "We encouraged farmers open to the idea to buy and train dogs against potential wolf attacks. We are now offering advice on how to choose the right animals for protection."

For those not comfortable with dogs, donkeys have also been trained as they are larger than wolves and can be equally aggressive when confronted by a threat. WWF has also helped farmers put up fences as another defense system against predators, and is taking groups — school kids and adults alike — out to 'wolf country' to meet with farmers to improve understanding between rural and city folk.

Last year, WWF volunteers helped

Ottavio Cotti-Cottini construct an electric fence to guard his herd of alpine goats. Earlier that year, and the year before, Cottini lost nine of his goats in separate wolf attacks.

that more wolves are expected to cross the border in the years to come. Its permanent residency status will depend, however, on how well all sides involved in the issue can come to a common understanding about the wolf's place in the Alps.



"I think more and more farmers are realizing that there are other ways to protect their livestock without having to shoot wolves," Schoenenberger added. "This is very encouraging."

Wolf recovery in Switzerland is at a very early stage and its future by no means secure. But, the reality of the situation is "If you think about it, the whole area of the Alps is former wolf territory. It is a fact that they lived here long before we did," Schoenenberger said. "Their return would be an important contribution to enriching Switzerland's biodiversity"

Mark Schulman's unabridged version of this story can be found at www.panda.org(alps

Wrapping up the problem The Andermatt "solution"

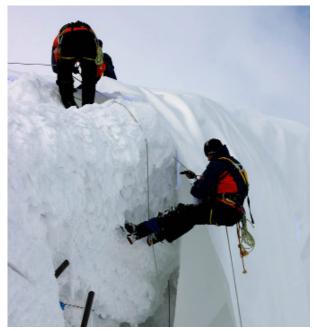


For more than 40 years, Gemsstock 2'961 m above sea level) has been the starting point for fascinating ski runs across the Gurtschen glacier, near the Swiss Alpine resort of Andermatt. Those days seem to have gone forever: in the last 15 years the mighty glacier has receded and has sunk about 20 metres from the top station. In winter, fresh snow fall can be prepared and groomed so as to make up for the sunken glacier. Not so in the summer.

So the Andermatt authorities came up with the idea of covering up the glacier during the summer months, to protect it from the rays of the unrelenting sun. The idea - "only an experiment" in the words of the Andermatt municipality - is to prevent the glacier from melting in summer by wrapping a portion of it in a PVC-foil. The inte-

rested surface amounts to 2'500 sq-metres. The PVC-foils (there will be two different protection layers) will be removed in autumn 2005. The protection foils were installed in early May, making more noise around Europe and the Alps, than one would have thought. A little controversy arose as environmental organizations pointed out that the "Andermatt solution" is in fact not a solution at all.

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Tough days for the Tagliamento

Killing the big river
Time is running out for the Tagliamento. The majestic river in the north-eastern

Time is running out for the Tagliamento. The majestic river in the north-eastern Italian region of Friuli-Venezia Giulia is the last large natural river in the Alpine arc. As such it enjoys (or so it should) special protection. Nonetheless the regional government of Friuli has approved ad hoc legislation to allow the construction of three large flood retention basins, the first of which might be given a green light in the month of May 2005.

WWF has presented a series of alternatives to deal with the flood problem. But these were not considered by the regional and national governments. The prospected retention basins would be built inside a special interest area. WWF Italy has started legal action to try and stop what it sees as another, deadly attack on one of the last remaining natural water giants of the Alps.



The breath-taking scenery of the Tagliamento River is in great danger.

Alpine Programme Alpine Programme

You can learn about the Alps, their biodiversity and WWF's work to protect and enhance it on our brand new Alpine web site can be found at www.panda.org/alps.

All sorts of Alpine-related news, indepth analyses, specialised publications as well as a list of threats and opportunities regarding the Alps. Just a click away at

www.panda.org/alps



The sun sets on Lake Maggiore, by the village of Vira-Gambarogno (Switzerland)

panda.org/alps

Alpine Calendar

What happens in the Alps in the coming months

May

22 International Day for Biodiversity

26-29 River Lech excursion

June

World Environment Day3-5 Draft trip down the Lech river, Austria

July

17 The Big Jump, jumping into Europe's rivers to testify water quality. All over Europe

28-29 Excursion on Natura 2000 sites, Vorarlberg

A blueprint for conservation

The WWF European Alpine Programme has published the Ecoregion Conservation Plan for the Alps. The alpine arc is part of the so-called Global 200, the regions of the world most important for their biodiversity features. In order to implement our work on the conservation of biodiversity, the Ecoregion Conservation Plan is both a first important step and a very necessary blue-print.

If you're interested and want to know more about it you can download it from our website

www.panda.org/alps

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