econnect
Restoring the web of life

ECONNECT NEWSLETTER MARCH 2010

NEWS FROM THE ECONNECT PROJECT

1. Maps and data on ECONNECT available online

The “GeoPortal” which is the central project repository for all spatial data and map products of ECONNECT is now online on http://gis.eurac.edu. Furthermore, the working group “Implementation strategy and data needs” has met to discuss the data situation at the current stage of the project.

The GeoPortal allows browsing, viewing, downloading and uploading data and metadata and also contains an overview map showing all pilot regions in the Alps as well as overview maps for each pilot region showing protected areas and Natura 2000 sites. The maps are available for anyone interested in the ECONNECT Project.

The ECONNECT Working Group “Implementation strategy and data needs” met on 5th February on a workshop in Bolzano (I). The data situation at the current stage of the project was summarised by the work package 4 leader EURAC research, and subsequently discussed by all workshop participants. It has turned out that the spatial data needed for the analysis in the pilot regions, i.e. the calculation of the

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Continuum Suitability Index, matches the data collected so far. Gaps still remain in some regions where discussions with the administration are ongoing. During the meeting it was pointed out that to make best use of more detailed data sets, the various regional data sets should not be harmonised in a sense to match them to the smallest common denominator.

2. Sharing connectivity knowledge within and beyond the Alps and visualising corridors and fragmentation

100 persons from eight European countries followed the invitation to the workshop in Grenoble, France, in November and used this opportunity for active knowledge transfer on ecological networks. The workshop discussions have helped the ECONNECT partners to agree on the appropriate methods which they are now using for modelling habitats and corridors for the whole Alps and for visualizing barriers.

In several presentations methodological expertise from various case studies was provided and shared with the participants. Discussion groups were formed to ensure the sharing of knowledge within three important issues of the project methodology and activity: Aquatic corridors, terrestrial corridors and participatory approaches. The workshop as a tool for the active knowledge transfer of the ECONNECT work package 8 profited from the expertise and direct participation of all attendees. Thus, the workshop yielded rich and manifold results for all involved stakeholders, conservation managers, non governmental and governmental organisations, scientists, and opinion leaders. The presentations, conclusions and the summary of the workshop, which was organised in cooperation of the University of Innsbruck, Cemagref Grenoble and the Conseil Général de l'Isère, can be accessed at: http://www.econnectproject.eu (en)

Based on the expert discussions during the workshop, partners of work package 5 could agree on appropriate methods they will use to model habitats and corridors for

the whole Alps and to visualise barriers. For this task functional landscape connectivity corridor models have been chosen. Selecting the appropriate modelling methods was the first important step towards the identification of corridors and barriers. The next step of work package 5 will be to collect observation records of the indicator species (four sylvan mammals, two birds, two water bound species). Various experts were contacted and the data set of one bird species (black grouse) is sufficient to start the modelling process. Nevertheless, better data availability is still desirable. A test run with black grouse is performed at the moment and the first results will be available soon.

3. Alpine riverine landscapes: connectivity, barriers and fragmentation

How strongly is a river landscape fragmented? What are the most important barriers and obstacles in Alpine rivers? These questions are in the focus of the Institute of Ecology from University of Innsbruck within its ECONNECT activities. The results will be visualized with the help of GIS and contacts to regional watershed authorities established for the reduction of barrier impacts and restoration.

Riverine landscapes are important habitats, dispersal and migration routs and corridors for aquatic but also for terrestrial animals and plants. In densely populated areas of the Alps and especially in areas surrounding protected areas riverine landscapes were altered intensively and often degraded in various ways. As a consequence, the natural distribution, movements and migration of aquatic and water-bound organisms is highly disturbed or inhibited. Work package 5 aims at improving this situation by analysing the potential to increase connectivity and decrease barrier effects and fragmentation.

In a first step barriers are analysed that are effective in the longitudinal, lateral, vertical and temporal dimensions of river systems. Fragmentation indices are applied

for the visualisation of fragmentation. In parallel, typical habitats and riverine species (brown trout, grayling, bullhead, tamarisk, …) are identified. Potential barriers that can have an impact on the habitat and movements of these species will be visualised on maps.

In the present project period, work focuses on specific pilot regions. Effective barriers and obstacles within the riverine landscapes will be identified and contacts to regional watershed authorities established for the reduction of barrier impacts and restoration.

More details on the method can be found on www.econnectproject.eu.

4. Ecological connectivity and the law: from barriers to instruments

The ECONNECT project aims at creating the best possible conditions for ecological connectivity across the Alpine range, thus implementing article 12 of the Nature Protection Protocol of the Alpine Convention: "*the Contracting Parties shall pursue the measures appropriate for creating a national and cross-border network of protected areas, biotopes and other environmental assets protected or acknowledge as worthy of protection. They shall undertake to harmonise the objectives and measures with the cross-border protected areas.*"

An important component of the project is that on *Legal Barriers* (also known as WP6), an effort led by MATTM, the Italian Ministry of the Environment), together with EURAC, Region Valle d'Aosta and CIPRA France. Its work is steadily progressing, as ECONNECT enters its second year of life.

The main objective of this component is to assess the legal framework for ecological networking in different Alpine countries and to provide examples and propose good practices (such as the EGTC, European Grouping of Territorial Cooperation, a new instrument adopted by the European Union) to establish connections among

protected areas across borders, so that the migration and conservation of wildlife is made easier throughout the Alpine space.

For instance, experts from both EURAC, an innovative applied research institute located in the heart of the Alpine arc, and Region Valle d'Aosta are carrying out a comparative analysis on the legal frameworks of ecological connectivity in all Alpine countries, starting from France and Italy in order to assess the present situation and produce a methodology which can be used elsewhere.

Moreover, the partners of the project involved in this component are analyzing the legal situation of the pilot areas of the ECONNECT project, many of which are trans-boundary. A workshop specifically targeted at the pilot regions is being organized by CIPRA, scheduled for May, 6th in Grenoble, France. This is a follow-up to an early workshop on Trans-boundary co-operation between protected areas in the Alps, held on April 19, 2009 by MATTM and EURAC in Domodossola, Italy, and will also provide the opportunity to discuss the tentative results of a survey involving all pilot regions.

This workshop will also be an opportunity for the actors involved in the creation of an Alpine Ecological Network to be informed and discuss the legal aspects of this common effort. The results of the workshops and of the ongoing analyses will result in a final report to be presented at the Final Conference on ecological connectivity and the law, scheduled for December 2010 in Aosta, Italy.

Hopefully, by then, this component of the project will have contributed to raising awareness among the actors involved, facilitating the harmonized management of trans-boundary corridors, and ultimately transformed the perception of the law from a barrier to an instrument.

5. Understandable and visualised ECONNECT website

The ECONNECT website www.econnectproject.eu has recently been translated into the four project languages (French, German, Italian and Slovenian) and will soon be updated with maps.

The work package 3 “Information and Publicity” is furthermore going to launch a photo contest that aims at involving photographers all across the Alps. The contest will start in June and last until the end of December. The theme of the contest and the members of the jury have already been decided. The contest will be based on Flickr social network and on the ECONNECT website. More information will be soon available on www.econnectproject.eu.

Thanks to the “GeoPortal” tool developed in the frame of work package 4, maps of the Pilot Regions will be put online to make people understand where the project is acting and which measures ECONNECT is evaluating and implementing. The GeoPortal will thus make the website more appealing. The maps will be presented using Google Maps. This will allow showing the location of all measures put in place by the Pilot Regions.

NEWS FROM THE PILOT REGIONS

1. Berchtesgaden – Salzburg: improving the ecological network of extensive grasslands

Extensively cultivated grasslands are important landscape elements for ecological connectivity in the pilot region Berchtesgaden – Salzburg. Improving these habitats will help to safeguard species such as butterflies, dragonflies or grasshoppers. This

is one of the tasks of the subprojects within ECONNECT which are currently being finalised.

According to expert opinions as well as spatial analyses, extensively cultivated grasslands have been identified as one important aspect of connectivity in the region. In order to maintain functional meta-populations of the mentioned insects, open spaces of a certain quality have to be existent in appropriate distances. But in the German-Austrian pilot region more and more cultivated areas are abandoned due to the low potential for profit. ECONNECT intends to support a process to improve the ecological network of extensive grasslands, e.g. by developing and testing innovative management and financing approaches. As a first step, a set of species is currently being identified in order to investigate the species-specific requirements for an ecological network of extensive grasslands in the pilot region.

The representatives of the pilot region Berchtesgaden – Salzburg furthermore presented their activities at the workshop "Networking diversity", which was organized by the Ecological Continuum Initiative in Berne/CH on February 12th in the frame of the conference NATUR. The presentations and the synthesis report are available on www.alpine-ecological-network.org/index.php/services-mainmenu-8/downloads-documents#natur2010.

2. Rhaetian Triangle: new online tools and support for local initiatives

The Swiss National Park (SNP) is currently developing a web based tool to analyze barriers and corridors of the large pilot region Rhaetian Triangle. Furthermore, two local initiatives are concretely acting for the restoration of ecological connectivity.

The new map application will allow comparing a freely defined area with other areas in the neighbourhood and identifying the fields with high need of action according to selected indices. This tool will help experts to identify the connectivity hot spots and

the ecological continuum as well as raising awareness in a wider field of the eco-interested community in the pilot region.

Apart from developing the web tool, the ECONNECT team of the SNP is also supporting two local initiatives in the Swiss-Austrian-Italian pilot region Rhaetian Triangle to restore ecological connectivity.

In the Austrian region around the river Inn, the Environment Advocacy of Tyrol (Landesumweltanwaltschaft) and WWF Tyrol have started a project to improve the connectivity of selected species along the historical route “Via Claudia Augusta”. Measures should be implemented to reduce the barrier impact of the heavily used road infrastructures in this area. This should help to measurably improve the migration of the selected species. ECONNECT supports the project team with knowledge concerning the selection of species, defining corridors and barriers and ensures the access to international know how. Moreover, this exemplary project should be promoted towards the Italian and Swiss partners in the pilot region Rhaetian Triangle.

In South-Tyrol, Italy, the nature protection group Vinschgau has submitted a resolution to protect the Rambach stream between the Swiss border and the estuary into the Etsch. The local authorities are planning to implement a small scaled hydropower station in the Rambach with very limited economic value. In the last years, the Swiss part of the Rambach has been restored and is nowadays an outstanding example of a renaturalized stream. The realization of the planned project in South-Tyrol would destroy all efforts in the Swiss Val Müstair concerning connectivity of this water body and reduce the value of the ecological system distinctively. The resolution for the protection of the Rambach is therefore an extraordinary example of the importance of ECONNECT and the international collaboration on ecological connectivity.

3. Alpi Marittime: Ecological corridors preventing car accidents

Not only ecological corridors preserve biodiversity, but they are also an effective tool to reduce car crashes on motorways.

Econnect is an innovative European project related to the "Alpine Space Program 2007-2013" developed to restore connections between different habitats in Alpine areas. Furthermore, the problem of car crashes with animals is a major issue for Econnect. Wild animals, as ungulates, birds of prey, fishes and amphibians, are always moving on the same routes in order to feed or to reproduce. It may happen that these routes are crossed by motorways; this situation puts a potentially dangerous situation both for drivers and terrestrial species.

According to Alpi Marittime natural park, one of the seven Pilot Regions that constitutes the project, during the last two years car crashes which involved ungulates have been 419 in the Cuneo district (data by Cuneo Provincial Administration, Flora and Fauna Safeguard District). In most cases those accidents, besides being hazardous for drivers' life, could have been avoided with a better territorial planning, a more careful infrastructure planning and a warier use of existing technologies. New ways to aid the passage of animals across busy roads are tested in the French department of Isère (an Econnect Pilot Region as well), by placing motion and heat detectors on both sides of a road which, using an intermittent signal, warn the driver of a wild animal oncoming passage.

The Alpi Marittime national park was chosen due to its high biodiversity value and its geographical position, considered as a link among the Alps and Provence, the Mediterranean sea and the Padana plain. Other Italian institutions supporting this project are: Aosta Valley Autonomous Region, the European Academy of Bolzano, the Ministry of the Environment and WWF Italy. The Parc National du Mercantour (France) and the Fluvial Park Gesso and Stura, directly involved by the Alpi Marittime Park with other authorities and institutions which are able to contribute to

concretely deal with problems regarding conservation and biodiversity because of their competence, are even involved in this project.

Econnect project aims at creating ecological corridors (natural spaces where spreading of flora and fauna is free and not hampered by artificial barriers) among several Alpine areas, a good way to secure the preservation of genome, that is essential for the survival of species. Moreover, Econnect promotes the creation of a net that, by a common approach to the problems, permits crossing scientific and methodological "frontiers".

Three main plans make the Italian Park deserving attention:

- **Aerial connectivity**: reducing the danger for alpine galliformes (black grouse, rock ptarmigan and rock partridge) due to hanging cables of ski lifts or power lines. Improvements for safety of migrating birds of prey will be made, particularly all along the Stura Valley course, where wind turbine will be probably installed.
- **Water connectivity**: considering all the barriers placed on creeks and finding solutions to reduce or eliminate hindrances for the moving of water flora and fauna.
- **Terrestrial connectivity**: locating infrastructures considered as a problem for most sensitive species.

4. Northern Limestone Alps: involving local population

Within the Alpine Space project „ECONNECT", interviews with 170 stakeholder of the three provinces Upper and Lower Austria and Styria were held. People have been asked about their knowledge, experience and ideas concerning the connectivity of habitats and possible barriers by using a questionnaire.

These interviews aimed at receiving an overview of opinions on this theme as well as information on planned or ongoing projects dealing with ecological connectivity in the region.

In addition, stakeholders have been interviewed about habitats and species, which is important for connectivity in the pilot region, and whether they are interested to participate in the elaboration of projects.

At the same time, it has been created a database with funding possibilities. It includes all funding resources with might fit to projects dealing with ecological connectivity.

On December, 9th the results of these two activities were presented to approx. 45 participants at the visitor centre Ennstal (National Park Kalkalpen, Upper Austria).

The next steps within ECONNECT include the exchange of information and experience with stakeholder groups as well as the elaboration of objectives, themes and projects in the Pilot region, divided into four working groups:

1. Communication - public relations - regional development - tourism
2. Rivers and riverine habitats
3. Natural forests
4. Meadows and alpine pastures

5. Isère Department: Tearing down the barriers

The French Isère Pilot Region is very active in the field of ecological connectivity. Besides ECONNECT, since February 2009 the region is engaged in another EU Project named "Paths of life". This project will last six years and has a budget of nine million Euro.

In the framework of this project several meetings were organized on the field with all concerned stakeholders (mayors, farmers, hunters, naturalists,…) to share the elaborated cartography of the vegetal structures and the knowledge of the territory.

A fish pass is currently under construction. It will enhance the transmissibility at the river Breda, especially for trout. All fish have been temporarily removed from the river bed to protect them from dying during the working process. Furthermore, other construction works are planned, like an underpath or the installation of thermal detectors systems for animals.

Detailed maps showing the planned project activities and further information on the project are available on the website: www.pathsoflife.eu (en, fr)

NEWS FROM THE CONNECTIVITY SCENE

1. Green light for deer and lynx in the Alpine-Carpathian Corridor

In the future, wild animals will be able to move more easily between the Alps and the adjoining Carpathian Mountains. That is the objective of the recently initiated cross-border project Alpine-Carpathian Corridor. The EU is providing approximately 2 million Euros.

Taking into account issues related to nature conservancy, spatial planning, traffic, agriculture, forestry, hunting and tourism, and heavily involving the municipalities concerned, it will define concrete measures to safeguard interconnections among biotopes and realize these in the form of pilot projects. Overpasses with greenery will for example help deer and other animals safely to cross motorways and other large infrastructural works on their treks.

Under the overall responsibility of the Austrian Land Lower Austria, eleven project partners from Austria and Slovakia in the areas of administration, research, nature conservancy and infrastructure cooperate in the project, which will run until the summer of 2012. It makes an important contribution to the objectives of the Alpine, Carpathian and Biodiversity Conventions.

Sources and information: http://www.alpenkarpatenkorridor.at (de), http://www.wwf.at/de/akk (de)

2. Continuum Fact Sheets help implementing connectivity measures in the Alps

The Ecological Continuum Initiative supports the implementation of ecological connectivity measures on the ground with a new series of fact sheets for local stakeholders in German, French and Italian language. Some fact sheets are already available online.

The fact sheets are not only informative printed documents. Their main objective is to move to action. They target stakeholders who are implementing ecological networks, e.g. from the ECONNECT pilot regions. The series of ten fact sheets covers the most important fields of work where connectivity measures should be implemented: agriculture, forestry, water management, hunting and fishing, spatial planning, traffic, nature protection, and tourism. Special fact sheets will also be published for municipalities and other important players in the establishment ecological networks.

Each fact sheet explains the importance of its respective sector for ecological connectivity and lists concrete connectivity measures that stakeholders are encouraged to implement. Furthermore, good-practice examples from the Alps are

presented in each fact sheet and show that connectivity measures really work. These good examples should motivate the stakeholders to imitate them.

The printable pdf versions of the fact sheets on Nature Protection (in German, French and Italian), Agriculture (in German and French, Italian version follows soon) and Traffic (German, other languages follow) are already available for download at: www.alpine-ecological-network.org/index.php/services-mainmenu-8/downloads-documents (en). The printed versions will be made available to the ECONNECT pilot regions in May.

3. An ecological network frame has become law in Lombardy

On February, 18th the *Regione Lombardia*, Italy, officially approved the Regional Ecological Network (REN), which includes and considers in the regional territorial planning all priority conservation areas defined by the WWF European Alpine Programme and its partners in Gap in 2001. It is an important decision for Italy, for all the Alpine countries and the projects, like Econnect, concerning connectivity; in fact, it is the first time that an ecological network frame acquires force of law in Italy.

This pivotal decision now implies that all provinces have to align to this resolution in all successive planning stages, taking into account the areas included in the REN. The *Regione*, the *Fondazione Lombardia Ambiente* and private sponsors will additionally finance a biannual monitoring plan, starting this year.

4. Austria: pressure caused by exploitation rose at the highest altitudes

The psychological block that so far prevented from planning and authorizing projects in sensitive high mountain areas further decreased during 2009. The Austrian Alpine Club (OeAV) warns against the destruction of landscape and recreational resources

on the Alps and asks for a framework for a well-balanced territorial planning, in order to preserve the typical Alpine landscape.

All across Austria can be observed the tendency to build cableways and other skiing infrastructures inside the boundaries of protected areas and other high-value zones: examples of this inclination are the foreseen construction of a cableway across Warscheneck protected area, an underground cog railway through the central region of the Hohe Tauern National Park from Sportgastein to Schareck or the project of a cableway inside the "peace-zone" of Kalkkogel.

In 2010 the OeAV will examine closer all these cases; during a press conference held at the end of 2009, the OeAV urged the Tirol government to define a framework that shouldn't allow the exploitation of protected areas.

The *Piz Val Gronda* represents a very interesting example of this process. For 30 years this peak, which rises between Austria and Switzerland, has been menaced by regular attempts of exploitation. So far, these plans have been rejected thanks to the exceptional richness in flora of this region and because of its exceptional geological and geomorphologic variety.

The scientific paper by OeVD named *"Piz Val Gronda - a peculiar natural oasis inside the Austrian Alps"* is downloadable here: http://www.alpenverein.at/naturschutz/Publikationen/Fachbeitraege/index.php?navid=43 (in German).