

SUMMARY DESCRIPTION OF THE PROJECT

PROJECT TITLE: TIB - TRANS INSUBRIA BIONET. HABITAT CONNECTION AND IMPROVEMENT ALONG THE INSUBRIA ECOLOGICAL CORRIDOR BETWEEN THE ALPS AND THE TICINO VALLEY

PROJECT OBJECTIVES:

The objectives of the present project can be summarized as follows:

1. Reducing biodiversity loss caused by habitat fragmentation, degradation, and destruction, through the improvement of the functionality of the ecological corridor linking the Alpine bioregion with the Continental bioregion in the Po Plain/Insubria area between the Ticino valley and the Varese Prealps.
2. Re-establishing the latitudinal connectivity between the Alpine and Continental bioregions for target species (from various taxonomic groups) with different degrees of mobility. The project helps complete the natural ecological corridor between the Ticino River Park and the Campo dei Fiori park. This is the weak link as it is threatened by human activities, but is also the only possible route of dispersal for many species. Currently, this is the most suitable corridor for preserving a functional link between the Alps and the Apennines through the Po Plain.
3. Improving the functionality of critical passages identified along the ecological corridor.
4. Improving, whenever appropriate, the conservation status of Natura 2000 sites, other protected areas, and areas deserving of protection within the framework of the ecological corridor in question.
5. Integrating the needs of generic land use planning with the needs to preserve biodiversity and maintaining coherence with the Natura 2000 network. This can be achieved by strengthening the environmental goals of municipal, provincial, and regional land use planning thanks to the demonstrative intent of the LIFE+ TIB project as a whole, which was conceived within the framework of a major participation and governance initiative.
6. Fighting the spread of invasive exotic species through strategic environmental enhancement interventions.
7. Through the dissemination of results, raising institutional awareness on the urgent need for systemic interventions in favour of large-scale ecological connectivity.
8. Encouraging a culture that acknowledges the intrinsic value of natural capital and the ecosystem services nature provides to the reference community.

ACTIONS AND MEANS INVOLVED:

With their own funds, the beneficiaries and co-financer of the present proposal carried out two projects between 2008 and 2010 – which are described in more detail in form B2d – whose actions do not overlap with those of LIFE + TIB but partly underlie its foundation. In fact, some of the results obtained by the two projects have proven to be important elements for the drafting of the present LIFE+ TIB proposal (see form B2d).

With the funding requested from LIFE+ we intend to carry out the activities summarized below, which aim to achieve the goals detailed above and fight the threats described in Form B2d.

Activities to help animals cross man-made barriers (defragmentation) (target species: animals with medium and high vagility)

- Underpasses for amphibians and small animals;

- Underpasses for small and medium-sized animals;
- Improvement of existing underpasses;
- Interventions to improve animal passage in waterways flowing in culverts/under bridges.

ACTIONS TO IMPROVE ENVIRONMENTAL QUALITY (TARGET SPECIES: ANIMALS WITH LOW VAGILITY)

Re-creating or enhancing the habitat of target species (see Form B2c) through the following interventions:

- Creation of small wetlands and recovery of existing wetlands that are about to be filled in;
- Creation of dry stone walls;
- interventions targeting exotic tree species to hasten their senescence and increase tree necromass;
- creation of log pyramids in woodlands in order to increase suitable sites for saproxylic fauna;
- planting new *Salix alba* trees to be managed by pollarding.

ACTIONS TO FIGHT THE SPREAD OF INVASIVE EXOTIC SPECIES

Experimentation with various techniques to remove invasive exotic water plants in the project area, such as *Nelumbo nucifera* and *Ludwigia grandiflora*. *Nelumbo nucifera* removal techniques will be experimented with in SCI/SPA IT2010007 “Brabbia Marsh”, while *Ludwigia grandiflora* removal techniques will be experimented with in SPA IT 2010501 “Varese Lake”.

AWARENESS-RAISING ACTIONS AND ACTIONS AIMING TO STRENGTHEN THE INTEGRATION BETWEEN LAND USE PLANNING AND BIODIVERSITY PROTECTION NEEDS

The project includes a specific Communication Plan aiming to involve, through various means, environmental experts – including through the involvement of professional associations -, local and national politicians and administrators, teachers, journalists, and citizens. Strategic activities will take place both at the local community level (project area) and on a broader spatial scale: provincial, regional, national, and European.

In particular, we intend to achieve the following:

- Project website (general container)
- networking for technical training at the local and national levels;
- networking for the exchange of information and experience at the national and European levels;
- documentary video;
- planned and continuous involvement of local and national media, including the production of informative audio-visual material for radio and television channels;
- strategically located on-site panels;
- leaflets on various issues;
- technical scientific publication;
- layman’s report;
- awareness-raising program for teachers;
- final conference;

- establishment of a local conservation group;
- writing of technical and scientific articles for magazines;
- posters.

The involvement and consultation of interested parties regarding the project implementation process will be ensured by Action E.3, which calls for establishing a continuous relationship with project supporters through meetings of the Associate and Stakeholders Assembly (ASA), a body made up of a representative for each Associated Beneficiary and Stakeholder, with the purpose of facilitating project activities in each specific territory.

It should be noted that all the institutional bodies with land-use planning responsibilities in the project area are involved in the project: 35 municipalities, 2 regional parks, and key stakeholders including: BirdLife Europa, European Foundation Center (EFC), Infra Eco Network Europa (IENE), the professional orders of architects and engineers of the province of Varese, the magazine Ecologia Urbana.

EXPECTED RESULTS (OUTPUTS AND QUANTIFIED ACHIEVEMENTS):

Increasing the functionality of the ecological corridor covering about 15,000 hectares and including 14 Natura 2000 sites between Campo dei Fiori and the Ticino River Park, through the improvement of environmental quality and the removal of problems related to the crossing of man-made barriers. Strengthening local consensus and disseminating results at the regional, national, and European levels in order to encourage other interested parties to use the project's techniques and methods to reverse biodiversity loss.

The planned interventions are quantified as follows:

- n. 5 underpasses for amphibians and small animals;
- n. 8 underpasses for small and medium-sized animals;
- n. 3 interventions to improve existing underpasses;
- n. 3 interventions to improve waterways flowing in culverts;
- creation of small wetlands (n. 10) and recovery of existing wetlands about to be filled in (n. 3);
- creation of about 500 linear meters of dry stone walls;
- interventions targeting exotic tree species to hasten their senescence and increase tree necromass in a 240 hectare area;
- creation of 150 log pyramids in woodlands in order to increase suitable sites for saproxylic fauna;
- planting 350 new *Salix alba* trees to be managed by pollarding;
- experimentation with different techniques for the removal of the invasive plant *Nelumbo nucifera* over a surface of 10,000 square meters and *Ludwigia grandiflora* over a surface of 10,000 square meters;
- creation of a website;
- printing 5,000 copies of a layman's report;
- placement of 15 strategically located on-site panels;
- printing n. 50,000 leaflets on 5 different topics relevant to the project;
- 2,000 copies of a 30-minute documentary video, shown at 30-50 evening screenings and 10-20 film festivals;
- About 40 total minutes of video clips produced
- n. 3 press conferences, n. 15 press releases and n. 2 events for journalists;
- technical presentations to agencies, professional societies, universities, and associations;

- 5,000 copies of a technical scientific publication aimed at planners and technicians to provide incentives for planning efforts and projects compatible with biodiversity conservation and the protection of ecological corridors;
- A final presentation conference with 150-200 participants;
- participation in about 10 public events with volunteers;
- Writing of 5-7 technical and scientific articles for magazines;
- N. 3 workshops for teachers;
- International presentations both during scientific conferences (e.g. networking with BirdLife, Iene, CIPRA, IUCN) and in institutional contexts (e.g. European Foundation Centre).

Overall, the project acts to fight the negative effects of climate change by facilitating the mobility of animal and plant species, thus helping biodiversity adapt to climate change.

The current LIFE+ proposal has demonstrative value since it was designed with the intention of testing, assessing, and disseminating the biodiversity protection efficacy of a strategy to re-establish ecological connectivity