

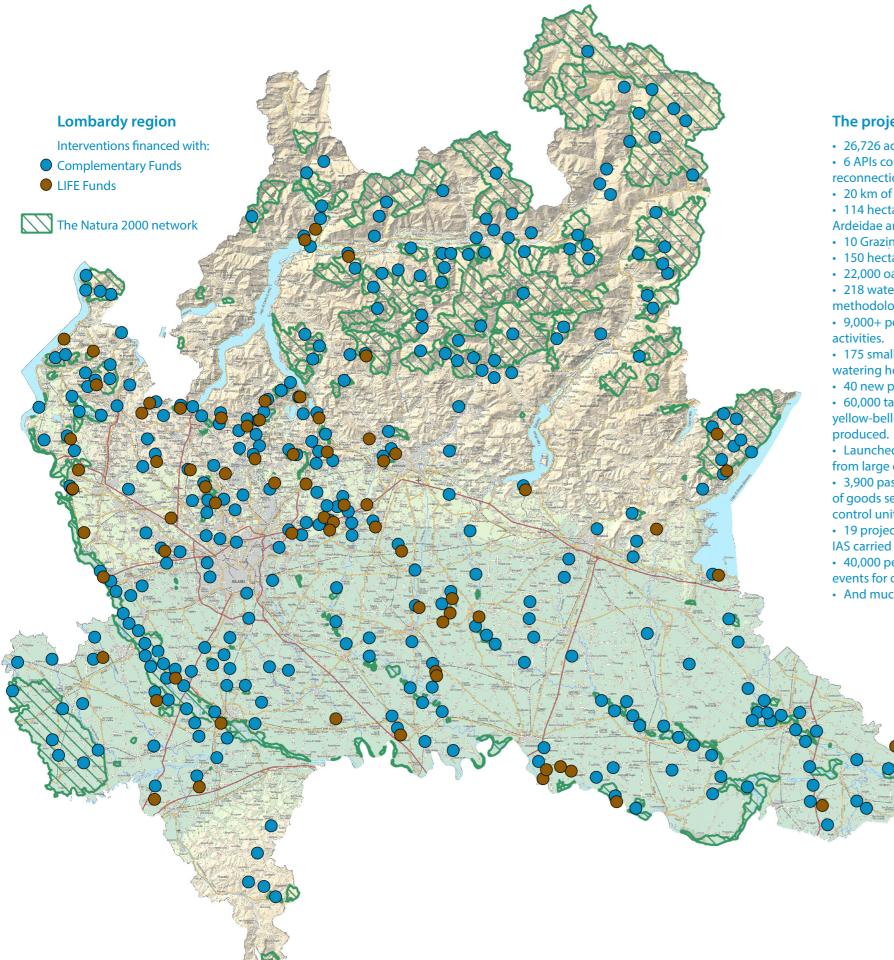
GESTIRE 2020 Layman's report

Nature Integrated Management to 2020 Eight years of work for biodiversity



LIFE14 IPE/IT/018 - Nature Integrated Management to 2020. La strategia integrata per Rete Natura 2000 e la biodiversità in Lombardia.





The project in numbers

- 26,726 activities carried out.
- 6 APIs concerned by ecological reconnection.
- 20 km of power lines made safe for birds.
- 114 hectares of suitable habitat for Ardeidae and wetland birds created.
- 10 Grazing Plans drawn up.
- 150 hectares of improved forests.
- 22,000 oak seedlings distributed.
- 218 water bodies concerned by the new methodology for ecological flow.
- 9,000+ people involved in Bat-related activities.
- 175 small lowland wetlands and mountain watering holes restored.
- 40 new ponds and pools created.

 60,000 tadpoles of spadefoot toad, 400 of yellow-bellied toad and 6,500 native prawns

• Launched a Strategy to prevent damages from large carnivores.

- 3,900 passengers checked, and 2,000 kg of goods seized by the Orio al Serio airport's control unit.
- 19 projects to counter plant and animal IAS carried out.
- 40,000 people involved in 542 training events for capacity building.
- And much more ...

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LIFE IP GESTIRE 2020

Nature Integrated Management to 2020

Co-financed by the LIFE Programme of the European Union, the LIFE IP GESTIRE 2020 is a complex strategic project that has achieved important results: the improvement of knowledge and management capacity of N2K sites, the implementation of projects for the improvement of the conservation status of habitats and species that are particularly protected or at risk of disappearing, the implementation of interventions for ecological connection or to contrast the spread of alien species, targeted surveillance of sites and raising awareness on issues related to the protection of biodiversity.

Direct investments from the LIFE Fund, integration with other regional funds and long-term vision: this was the strong point of the LIFE IP GESTIRE 2020 project, which, in addition to the financial availability (17,345,496 euros, of which 10,004,210 from the European Union) and the longterm (8 years), provided for the integration of policies and funds to achieve the expected objectives. The latter include, for instance, funds from the Rural Development Program and the European Social Fund, the regional Green Areas Fund and funding from Fondazione Cariplo.

The resources were invested entirely for the benefit of the regional territory and also intended for the managing bodies of the N2K sites. An opportunity, therefore, also for "green" jobs and for a growth in the culture of biodiversity.

The LIFE IP GESTIRE 2020 has achieved the expected biodiversity conservation objectives, in particular:

• Improve the governance and management models of the N2K to achieve several policy objectives, through increasing the capacity building of the multiple subjects involved in the management of Natura 2000 network in the Lombardy Region.

• Maintain and improve the conservation status of habitats and species.

• Increase awareness and information on the value/ potential of Natura 2000 areas.



• Monitor the effectiveness of the project in pursuing the objectives of the PAF.

Furthermore, the project made it possible to build a solid partnership with the neighboring Regions and to obtain funding for the Strategic Nature Project LIFE NatConnect2030, which will expand the objectives of the LIFE IP GESTIRE 2020 to 4 other Regions of Northern Italy.

The project is coordinated by the Lombardy Region, and has involved, as partners, ERSAF, Carabinieri Forestali, FLA, Lipu, WWF and Comunità Ambiente Srl, while Fondazione Cariplo co-financed the project.

During the project, the managing bodies of the Natura 2000 network were also involved, as well as the stakeholders, who participated directly in the sharing and implementation of the project strategy.

For further information, visit the site www.naturachevale.it.



The LIFE IP GESTIRE 2020 was a complex project divided into 64 actions grouped into the macro-actions illustrated in the table below:

OBJECTIVE	MACROACTIONS	RESULTS	ACTIVITIES
Maintain and improve the conservation status of habitats and species	Ecological connections	Maintenance and increase of ecological connections, RER implementation	Analysis of intervention priorities, implementation of interventions, promotion of best practices
	Habitats, forests and plant species	Improvement of the conservation status of meadow environments, peat bogs and forests and some plant species	Planning, identification of priorities and implementation of interventions; improvement of forest habitats' status; selection of resistant oak strains and structural improvement of oak trees; analysis for protected flora species and reintroductions; dissemination.
	Ecological flow	Maintenance of the ecological flow of watercourses	Definition of ecological flow, application of the model, dissemination.
	Animal species	Improvement of the conservation status of birds, bats, amphibians and reptiles, crayfish, large carnivores of community interest	Birds: planning, identification of priorities, implementation of interventions including securing power lines and ski facilities. Bats: Action plan, conservation interventions and "bat helpdesk". Amphibians: Action plan, implementation of interventions. Crayfish: planning and implementation of interventions. Large carnivores: training and updating courses, management procedures. Dissemination of best practices.
	Invasive Alien Species	Definition of a control strategy also through limiting the entry of new species.	Regional strategy for the control and management of animal and plant IAS; containment protocols; enforcement actions; awareness raising; integrated prevention system at Orio al Serio airport; dissemination.
Improve governance and management models	Capacity building	Improvement of skills and know-how of all those involved in the management of N2K	Definition of training needs and implementation of training courses; dissemination.
	Governance	Improved governance of N2K sites	Evaluation of current models, critical issues and proposals; application of models; dissemination.
	Harmonization of legislation and surveillance protocols	Improvement of surveillance procedures and skills	New surveillance protocols; sharing and application of procedures; sharing best practices
	Technical Facilitators	Mobilization of complementary funds	14 technicians hired to facilitate the use of complementary funds through collaboration with managing bodies and the agricultural work
Increase awareness and information	Communication	Increased knowledge on N2K, conservation threats, best practices	General communication strategy connected to the individual lines of action; networking.
Monitor the effectiveness of the project in pursuing the PAF objectives	Monitoring	Verification of the impact of project actions	Monitoring of the environmental and socioeconomic impact, and of the implementation of the PAF.



Ecological connections

Objective

Create a topographic database for the definition of ecological connection interventions to guarantee the coherence of the Natura 2000 network also at a local level and increase the availability of areas capable of providing ecosystem services adequate to the territorial context. Communication actions to raise technicians, administrators and freelancers awareness on the importance of ecological connections for the protection of habitats and species and the ecosystem services they provide.

Activities carried out

Topographic database

Topographic database was created in shapefile format, consistent with the GeoPortal of the Lombardy Region containing the projects and feasibility studies financed by the various Financing Funds in the years from 2004 to 2016 with environmental relevance.

Study for the identification of Priority Areas of Intervention (API) for ecological connectivity The study illustrates the analyses conducted for the identification of areas where the priority is to strengthen the ecological connectivity of the Natura 2000 network in the Lombardy Region, through the consolidation of functional habitats for specific target animals present in the areas where anthropic pressure are expressed with greater intensity (i.e. in the lowland and piedmont areas). These areas have been called Priority Intervention Areas (API). The target species are: all species of the Odonata and diurnal Lepidoptera groups, *Rana latastei* and *Rana dalmatina*, *Triturus carnifex* and *Lissotriton vulgaris*, *Ixobrychus minutus*, *Ardea purpurea*, *Alcedo atthis*, *Lanius collurio* and *Lanius minor*, all species of Chiroptera.

At the end of the APIs perimetration, detailed analyses were carried out in each API to define and confirm the specific interventions envisaged and identify their location. The interventions proposed for each API were designed by Intervention Management Schemes, described and illustrated graphically in specific sheets. These master plans represent the reference for the future design and implementation phases of the proposed interventions (types of intervention). For each type of intervention, a sheet has been created with design indications, general costs of the intervention and possible sources of financing. For each API, an infographic indicating the location, the ecosystem framework, the target species and the types of intervention was produced and published on the project website (https:// naturachevale.it/connessioni-ecologiche/aree-prioritarie-diintervento-api/).



The mapping of the APIs has been uploaded on the Geoportal of the Lombardy Region and has been incorporated into the Regional Territorial Plan. The APIs have been included among the "System Actions" described in the Plan Document.

Furthermore, a "Project for a local ecological network for the protection of populations of community interest in an area characterized by N2K sites within the Regional Park Parco Oglio Sud and the RN le Bine" was drawn up. Consequently, two ponds were created (about 200 m² each) with barriers to limit the presence of *Procambarus clarkii*, an invasive alien species of shrimp with a particular impact on amphibians.

Communication activities

Meetings were held at the territorial offices of the Lombardy Region, involving the local authorities and associations where the APIs are located to promote the interventions. Another 24 meetings were held online with municipal, provincial and regional Park authorities, as well as professionals. The meetings were dedicated to sharing the value of biodiversity and the importance of its integration into territorial governance policies and design choices.

Results

- Topographic database.
- Study to identify 41 priority areas for intervention (API).
- Creation of 9 projects in 6 APIs. The interventions carried out involved an area of approximately 7.5 ha.
- Construction of 2 ponds of 200 m² each in the RN le Bine.
- 44 meetings held.

Habitats, forests and plant species

Objective

Protect plant species of EU importance; preserve or improve the quality of forest, aquatic and herbaceous habitats listed in the Habitats Directive, both with the drafting of guidelines and with concrete actions.

Activities carried out

Habitat and plant species

Guidelines for the protection of the habitat 4030 in the continental context; networking with other LIFE projects on the protection of plant species and the conservation of the habitat 4030; Flora Action Plan with intervention sheets for 26 species in the Habitats Directive; monitoring of habitats 7210, 7230, 3220, 3230, 3270, 4030, 91E0, 6230, 6150, 6150, 7110, 7140, 6210, 6520 and of the distribution of the 27 plant species of EU importance; monitoring of saproxylic habitats, avifauna and entomofauna in forestry sites.

<u>Forests</u>

Guidelines for the silvicultural management of oak forests; technical sheets for the improvement of silviculture and wildlife suitability in habitats 9160, 9190, 91F0, 91H0*, 91L0; protocol for the conservation of Habitats 9410, 9110, 91K0, 9180 and the improvement of their suitability for fauna during silvicultural interventions; guidelines for the management of forests included in the Lombardy Seed Forests Register; structural, ecological and genetic characterization of the "Carpaneta Forest"; 3 moorland conservation projects in Natura 2000 sites; conservation interventions in 21 forest areas of regional state property; 8 interventions for the improvement of oak habitats in Natura 2000 sites.





Results

Habitat and plant species

9 cultivation protocols, *in situ* reinforcement of 8 species and conservation of germplasm of 13 species; 10 Grazing Plans in Natura 2000 Sites, improvement of approximately 0.5 ha of habitat 4030.

Forests

Improvement of 150 hectares of regional state property forests in habitats 9410, 9110, 91K0, 9180; improvement of 85 hectares of oak habitat forests 91F0, 91L0, 9190, 9160, 91H0; proposal to establish the "Foresta della Carpaneta" biogenetic natural reserve.

Dissemination

Creation of 2 "Forestry Education" seminars, posters to promote the conservation and increase of biodiversity in the forest; photographic exhibition with 15 roll-ups, photographic exhibition with 17 explanatory roll-ups on species and habitats, 10,000 posters on flora and habitats, 3 display gardens, 9 educational modules for schools, 9,000 postcards and 500 bookmarks on plant biodiversity, informative video and 165 photographs of the 52 habitats, implementation of the Biodiversity App of the Lombardy Regional Biodiversity Observatory; production and distribution of 22,000 oak seedlings at the ERSAF nursery in Curno (BG).

Ecological flow

Objective

Identify and test a methodology for the minimum flow of watercourses suitable for the conservation of aquatic species and habitats of Community interest.

Activities carried out

Identification of the methodology

For groups of watercourses comparable to each other from a hydromorphological and ecological point of view, the ecological flows suitable to guarantee a good availability of habitat for target species (fish and crayfish) have been identified. Furthermore, Natura 2000 riparian habitats have been identified for which it may be necessary to increase the flow downstream of the diversions.

Application to regional legislation

The methodology merged into the implementation process of the ecological flow in Lombardy through the determination of the corrective factors, and it is the basis of the definition of the "naturalistic" corrective factor N.

<u>Test</u>

6 water bodies were selected, representing as many ecomorphological groups along which fish monitoring and hydromorphological surveys were carried out, to validate the effectiveness of the methodology and increase understanding of the relationships between target habitats and species.





Definition of site-specific flows

Specific tools have been created for the managing bodies of Natura 2000 sites aimed at allowing further insights into the needs for adequate flow in the streams and rivers of protected areas,. This has been done in order to guarantee optimal availability of habitat and to allow the definition of site-specific ecological flows aimed at safeguarding biodiversity, as required by the technical implementation standards of the Regional Water Protection Plan.

Capacity building

Two intensive training courses were held in which officials from the Lombardy Region, Arpa Lombardia, ERSAF, Provinces, Parks and research institutes participated, aimed at understanding the MesoHABSIM methodology underlying the method described for defining the adequate flow rates.

Results

• The methodology developed was subject to regional legislation (Regional Council Resolution 2727/2019) for the adoption of the corrective factor N of the Ecological Flow in Natura 2000 sites and in other protected areas of Lombardy and involves 218 of the water bodies considered relevant by the Po Management Plan.

• Thanks to the methodology, for these water bodies, it was possible to propose on a regional scale an Ecological Flow, to be released downstream of the diversions, characterized by a flow rate up to double that of the basic hydrological component alone.

• The test of the methodology and the capacity building action have made it possible to provide the cognitive elements necessary for the managing bodies of the Natura 2000 sites to define site-specific flows, where necessary, higher than those foreseen by the regional planning and calibrated according to the species and habitat needs.

Birds

Objective

Mitigate the pressures on avifauna to counteract the main existing threats, i.e. degradation of wetland habitats, presence of barriers and anthropogenic disturbance.

Activities carried out

Study and mapping

• Definition of priorities of interventions in wetlands, with drafting of 9 technical sheets aimed at target species for specific sites.

• Classification of 7,177 km of suspended and electrified cables and identification of intervention priorities.

• Collection of all collision/electrocution data that are available for the study area.

Environmental restoration and interventions in the field

• Twenty-three interventions in favour of aquatic birds, of which 8 are dedicated to heronries, 6 to the restoration of wetlands and 9 to terns, with the positioning of artificial structures for nesting and protection of natural sites from disturbance.

• Safeguarding 170 pylons on 20 km of medium voltage line in the provinces of Bergamo, Brescia and Sondrio from the risk of electrocution.

Raising awareness

Dissemination and awareness on correct behaviours to adopt during outdoor activities:

• Information campaign with the slogan "This house is not a hotel!" with the 5 golden rules to follow in river and mountain environments.

• Production of the volume "I don't disturb", a best practices manual for the creation of fruition structures and methodologies for minimizing disturbance.

Monitoring

Carrying out pre- and post-work monitoring in sample intervention sites.





Results

• Over 10 pairs of *Bubo bubo* made safe from the risk of electrocution.

• No mortality cases recorded on the lines made safe.

• Involvement and awareness of electricity network managers through the signing of a protocol with e-Distribuzione and signing of a commitment by Terna to secure the most dangerous sections of line against collisions.

• Increase in habitats suitable for nesting and wintering of Ardeidae and Wetland Birds for a total of 114 hectares.

• Protection through the apposition of signposts and fences of the largest terns nesting site on the Ticino River which led to the settlement of 70 pairs of *Sterna hirundo*.

• 246 pairs of *Sterna hirundo* registered in 2022 (*post-operam*), of which 45 on artificial rafts, compared to 169, of which 20 on rafts, monitored in 2019 (*pre-operam*).

• 100% of new tern platforms occupied.

• Training of over 650 people including hiking guides, trekkers, voluntary ecological guards, park rangers, through the organization of 25 training events.

• Involvement of the scientific community on human disturbance issues thanks to the creation of a round table on human disturbance on avifauna held during the XXI Italian Ornithology Conference.

• Training for managing bodies and various stakeholders on the setting up of routes and fruition structures compatible with both fauna conservation and fruition.

Chiroptera

Objective

Design and coordinate conservation measures and interventions in favour of bats in Lombardy through the drafting of a Regional Action Plan identifying common lines of intervention and related priorities. Create, at regional level, a "Bat Desk" aimed at providing specialist information and strengthen two Wildlife Recovery Centers active in the regional territory.

Activities carried out

<u>Planning</u>

Drafting of an Action Plan for Bats in Lombardy adopted

- by the Lombardy Region with DGR n. 1028 of 17.12.2018.Identification of priority intervention areas for bats in
- Lombardy and design of thematic maps.
- Definition of 3 technical sheets for intervention in specific habitat.
- Definition of 4 project sheets related to priority interventions in Lombardy.

Environmental restoration

- Publication of a public tender for the implementation of interventions for bats in Lombardy by applying the guidelines and indications included in the Action Plan.
- Implementation of interventions aimed at improving the protection of bat colonies at risk in Lombardy.
- Strengthening of 2 Wildlife Recovery Centers active in the regional territory, in a strategic position in the area to carry out specific activities on bats.

Raising awareness through the Bat Desk

• Response to requests for information from citizens and bodies in the regional territory.

- Creation of a "Colony Keepers" newsletter with specific information on the management of roost sites.
- Carrying out information activities.
- Data collection of bat sightings.

Monitoring

- Carrying out pre- and post-work monitoring at the intervention sites.
- Carrying out investigations on bat roosts to update knowledge on Chiroptera in Lombardy.



Results

- Involvement and awareness of stakeholders interested in bat conservation issues (speleological associations, municipal technicians, architects, etc.) through the creation of thematic training courses.
- Creation of a bat recognition manual for wildlife recovery centres.
- Response to over 3,100 requests for information from
- citizens in the regional territory through the Bat Desk
- 6,000 people, including over 1,500 belonging to the
- school world, involved in dissemination activitiesCollection of over 300 reports of roost sites through the
- Bat Desk.
- Realization of 9 projects for the protection of species and habitats.
- Improvement and protection of 8 bat roosts in Lombardy.
- Surveys on 15 species of Bats in Annex II and IV of the Habitats Directive in 19 roosts.



Amphibians and reptiles

Objective

Carry out interventions for the conservation of amphibians and reptiles, through the creation of new wetlands, habitats improvement and restocking actions. Amphibians and reptiles are in fact among the animals that are most affected by habitat alteration. Many species are threatened and are therefore protected under the Habitats Directive. Among them: *Rana latastei, Triturus carnifex, Pelobates fuscus insubricus, Bombina variegata, Salamandra atra* and *Emys orbicularis*.

Activities carried out

Study and mapping

• Analysis of the presence and distribution of target species, through the collection of updated data, identification of existing threats and check of the populations' status, to identify the most urgent conservation needs.

• Definition of a plan of priority interventions, approved with DGR 1922 of 15 July 2019.

Environmental restoration

• Implementation of 36 interventions for the conservation of wetland habitats (creation of new pools and ponds, improvement of existing ones and control of invasive species).

• Creation of 2 centres for the *ex situ* reproduction and breeding of *Pelobates fuscus insubricus* in the nature reserve "WWF Bosco di Vanzago" (MI) and *Bombina variegata* at the Colli di Bergamo Regional Park and 3 interventions of reintroduction and restocking.

• Promotion and implementation of interventions in favour of amphibians through complementary funds (ERDF, FAV, Cariplo...).





Dissemination of results

• Training of 250 people through 15 training events.

- Raising awareness and disseminating knowledge
- through the creation of a brochure in 100,000 copies.
- Production of a manual for the protection and management of amphibians aimed at a general public based on the experience gained.
- Creation of 2 informative videos, workshops, informative meetings, participation in scientific congresses and publication of 5 scientific articles.

Monitoring

• Carrying out pre- and post-work monitoring in sample intervention sites.

Results

• Training of over 250 people including volunteer

- ecological guards, park rangers and other volunteers.
 Restoration of at least 85 sites, including small lowland wetlands and mountain watering holes and creation of at least 40 new ponds and pools covering over 15 hectares, through 36 projects financed with LIFE funds.
- 90 small wetlands restored with complementary funds.
 60,000 *Pelobates fuscus insubricus* produced at the
- 60,000 Periodates fuscus insubricus produced at the "Bosco WWF di Vanzago" breeding center, with over 90% reproductive success; the tadpoles were released into the Oasis ponds to create a new population.
- 400 individuals of *Bombina variegata* produced at the "Cà Matta" breeding center in the Colli di Bergamo Regional Park, of which 300 reintroduced in the WWF natural reserve "Oasi of Valpredina" (BG) and in Val Taleggio (BG).
- Despite the drought of recent years, the presence of the target species at some intervention sites has been confirmed.

The native river crayfish

Objective

Continue the study and monitoring activities on the conservation status of *Austropotamobius pallipes* in Natura 2000 sites in Lombardy, to promote environmental improvement and the strengthening of native populations, to raise awareness among local populations on the functionality of the conservation of this species and its habitat to safeguarding the biodiversity of the territory and therefore improving the healthiness of the environment.

Austropotamobius pallipes is in fact threatened by the spread in its habitats of non-native freshwater crayfish, carriers of lethal diseases, by climate changes that alter the flow rates and raise the temperatures of streams, by the alteration and fragmentation of habitats.

Activities carried out

Studies and monitoring

• Periodic evaluation of the conservation status of the habitat and of the native populations present in the Natura 2000 areas in Lombardy. The project monitoring network consists of approximately 50 sites.

Performing genetic analyses to complete the

characterization of the investigated shrimp populations.Drafting of the Guidelines for the containment of alien shrimp species in Lombardy.

Production and sowing of juveniles

Between 2016 and 2023 the ERSAF reproductive centers in Tignale (BS) and Canzo (CO) managed 8 reproductive cycles and produced more than 6500 young crayfish to be reintroduced into nature.

Habitat improvement

Identification of critical situations in the conservation of the species' habitat and definition of technical sheets for the improvement of current conditions.

Training and dissemination

• Creation of 8 training courses for Natura 2000 management bodies on the biology and management of the species.

• Financing of 12 Communication Plans developed by 12 managing bodies of Natura 2000 sites in Lombardy.

• Creation and updating by ERSAF of editorial products to support environmental education and dissemination activities (30,000 brochures, 10,000 posters, 30 information panels for the information points of Natura 2000 managing bodies).

• Creation of a WebApp for children with 12 dedicated roll-ups; thematic project videos created by ERSAF.



Results

- Implementation of 6 interventions to improve the species' habitat, financed by the project and realised by the relevant managing bodies of the Natura2000 sites territorially involved.
- Conducting 26 sowings in 11 streams for the creation of
- new populations or the strengthening of existing ones.
 Creation of 9 emergency task forces by the managing bodies of Natura 2000 sites involved in the conservation activities of the species, to safeguard populations currently at risk.

• Involvement of 12,600 people, including guests of the Information Centres, students, policy makers, technicians and volunteers and creation of gadgets, informative comics and thematic videos, available on the project website, thanks to the communication plans.



The large carnivores

Objective

Consolidate the management strategy for large carnivores on the regional territory through the training of operators, updating management procedures (monitoring, prevention and damages compensation and management of emergency situations involving bears), the improvement of support actions to farmers and the dissemination of correct information.

Activities carried out

Implementation and updating of procedures

• Development of a protocol for the management of wolves found dead or injured in the Lombardy Region.

• Development of a regional strategy for prevention and management of conflicts arising from the presence of the wolf and of the brown bear in the Lombardy Region and of a unified model of damage assessment to farms and hives caused by wolf and bear.

• Review of the technical organisational document of the bear emergency teams and adaptation of supplies and equipment for bear emergencies.

• 8 training sessions dedicated to monitoring, emergencies, antipoaching and communication.

Support to farmers

• Analysis of the risk of wolf predation on livestock in the Lombardy Apennines, precise identification of the vulnerability of farms and definition of guidelines for the prevention of damage; contact with farmers' associations and subsequently with the most vulnerable farms, with the provision of damage prevention kits.

• Contribution to the definition of a new operation of the Rural Development Program 2014-2020 which, for the first time in Lombardy, finances the purchase of electrified fences and guarding dogs for the protection of livestock and hives from predation by large carnivores. Dissemination of information to potential beneficiaries, also through a specific webinar and support from Technical Facilitators for the submission of the applications.





Communication/awareness

• Organization of 47 public meetings in the regional area.

• Production of a brochure and leaflet on large carnivores, printing of 40,000 copies and distribution at huts and at

informative meetings.Production of 20 information panels on bear presence and positioning near hiking trails.

• Carrying out a survey on the perception of the bear, with around 800 responses.

Results

• Systematisation of data and information on presence of carnivores in Lombardy and on the activities of the Region, production of 4 reports on large carnivores.

• Launch of a strategy for damage prevention by large carnivores and involvement of the agricultural world in prevention.

• Dissemination of financing opportunities for prevention under the RDP, with 105 applications funded.

• Dissemination of information on large carnivores in Lombardy, with more than 370 people trained and almost 2,500 people reached through informative meetings.

Invasive Alien Species

Objective

Improve knowledge and systematize initiatives and projects regarding Invasive Alien Species (IAS) for a unitary framework of priority actions for prevention, dissemination and contrast with the definition of an Action Strategy.

Activities carried out

Governance

• Contribution to the implementation of EU Regulation 1143/2014 from the early stages of the project (2017) by hosting the LIFE Platform Meeting to share experiences and case studies on the topic of invasive alien species.

• Definition of the regional strategy for the fight and control of alien species with the support of an expert scientific group and the Regional Observatory for Biodiversity, with classification of species (black list), definition of intervention priority level and development of descriptive sheets including management indications for the eradication and/or control of invasive alien plant and animal species.

- Development and approval of specific intervention protocols for some invasive alien plants in pilot areas.
- Development and approval of the control and management plan for alien common sliders (*Trachemys*

spp).
Development and approval of guidelines for the containment of alien crayfish species in Lombardy.

 Design at the "Caravaggio" airport of Orio al Serio of an integrated control unit on flights arriving from non-European countries for repressive (checks) and preventive purposes (information for passengers, customs operators, airlines).

• Promotion of tenders for the implementation of interventions.

Communication/awareness

Organisation of local meetings, specific workshops, training courses, information points at the airport, traveling exhibitions, videos.

Prevention

• Activation with the logistical and organizational support of SACBO (Company for the Bergamo-Orio al Serio Civil Airport) of the integrated control point composed of trained units of Carabinieri Forestali, phytosanitary inspectors, staff of the Customs and Monopolies Agency inside the airport.

• Production of the code of conduct for horticulturalists.



Results

- 9 projects for the eradication/containment of EU
- invasive alien plants.
- Control/containment of invasive alien plant and animal species in 10 conservation protection projects in Natura 2000 sites.
- Control of alien crayfish during white-clawed crayfish conservation activities.
- Control and eradication of the raccoon from the Lombardy region.
- Control of alien squirrels (Pallas squirrel and grey squirrel).
- Control and management of alien common sliders species.
- 3 permanent detention centres *Trachemys* created with 534 individuals registered
- 40 information meetings in the area.
- 20 courses and training sessions.
- 1 traveling exhibition.

• 29 days of checks at the airport on 64 flights considered most at risk, 3,900 passengers checked with around 2,000 kg of goods seized.



Capacity building and governance

Objective

Increase capacity building and testing of innovative governance models.

Activities carried out

Capacity building

Overall, 542 training and information events were held, involving around 40,000 people. Most of the events were held in person on specific themes of the project actions.

Through 20 focus groups, which involved 122 different professionals, 13 training paths were identified.

The training for Public Administration was financed by ESF funds with an agreement with Formez PA, involving:

- 272 Carabinieri Forestali, Provincial Police, Park Guards.
- 95 technicians from Natura 2000 managing bodies.
- 109 officials of Territorial Authorities.
- 54 Teachers.

The courses, involving 198 participants, were structured with common contents (for example: biodiversity, work tools, evaluation methods, etc.) and 5 specialized training courses on the following topics: conservation of river habitats, large carnivores, invasive alien species, governance and community pacts.

An e-learning training about introduction to Natura 2000 was created for over 300 volunteer ecological guards, and a course for freelance professionals on the Appropriate Assessment procedure and IAS.

The *ex ante* and *ex post* questionnaires highlighted the interest and increase in skills of the participants.

Governance

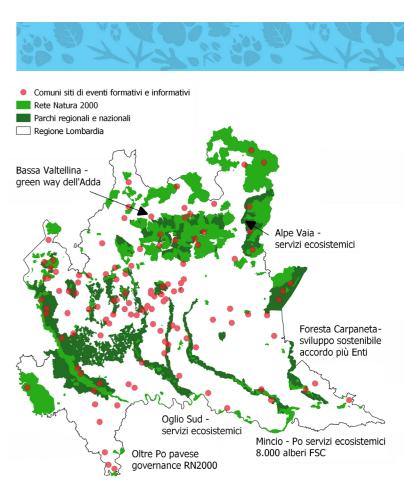
Tests were carried out on different types of governance models, applied to diversified areas and contexts across the regional territory. A common element was the valorisation of ecosystem services. The main stakeholders involved were: Natura 2000 management bodies, territorial administrations, land reclamation consortia, forestry consortia, universities, banking foundations, private individuals (farmers and companies), associations, FSC certification body.

Results

• "Innovative governance model of natural areas in Lombardy – The case of interventions on the Mincio-Po system": management of natural resources (planting of 8,000 trees and FSC certification) and verification of ecosystem services.

• "Innovative governance model in the Oglio South Park": strengthening and scale-up of a payment scheme for environmental services.

• "Innovative governance model in the Oltrepò Pavese": development of a governance system for the Natura 2000 sites.



• "Adda Greenway in lower Valtellina": supra-municipal ecological network design as part of the River Contract of the Upper Adda River Basin, formally approved by the territory.

• "Forest Agreement in Alpe Vaia": improving the multifunctional management of the forest, also enhancing ecosystem services, with the contribution of the Municipality of Bagolino and the manager of the mountain pasture, as well as with the collaboration of stakeholders.

• "Forest Contract in Carpaneta": definition and implementation of a coordinated project for sustainable development of the area. 16 public and private entities signed up to the Contract.

A new financial instrument has also been defined and made available by the Lombardy Region with internal resources, allowing the publication of the "Biodiversity and Climate" tender, officially presented during the EU Business & Nature Summit.

All the experiences of shared participation and construction of projects and management agreements have been an important opportunity for growth, exchange of knowledge, professionalism and operational methods that can be exploited in the long term; just as the creation of a new financial instrument opens up the scenario in an innovative way to catalize private funds for the conservation of biodiversity.

Surveillance

Objective

Improve the surveillance carried out on Natura 2000 sites.

Activities carried out

Based on the findings of the previous LIFE GESTIRE and multilateral contacts with management bodies, the necessary information was acquired on the Natura 2000 sites in Lombardy. This allowed to identify risk factors/ indexes linked to each siteand subsequently, to organize territorial surveillance areas with homogeneous risk indices/factors.

10 standard surveillance procedures were therefore defined and then implemented on the basis of the priorities attributed to each individual situation starting from 2019. The minimum surface covered by the action is approximately 3,000 km², i.e. the totality of the Natura 2000 sites of the Lombardy. Within the procedures, a series of parameters have been established. Site and species-specific surveillance interventions were then structured in order to optimize the available resources and maximize the effectiveness of the activities, and the actions to be carried out in each circumstance have been codified.

Specific training of Carabinieri's staff was also implemented, again with a view to optimizing surveillance operations and aimed at increasing competence, awareness and attention relating to Natura 2000.

In 36 months of activity, approximately 3,000 check lists have been produced, reviewed and analysed and 4 annual reports have been produced with the management and analysis of the data collected, the reporting of the most significant activities carried out, the development of operational and management statistics.



Results

This macro-action has contributed to addressing the main critical issues that have emerged in more than 20 years of implementation of the Habitats Directive in Lombardy. In particular:

- Sharing knowledge and particularly threats with all stakeholders.
- The rationalisation of procedures and planning of activities.

• Increasing, the awareness and capacities of the surveillance personnel involved through training.

• The creation of a constant and linear communication flow with the management bodies.

• Networking and shared approaches and procedures with other surveillance operators, such as provincial police, park rangers and volunteer ecological guards.



Technical Facilitators

Objective

• Identify, promote and implement projects aimed at safeguarding biodiversity through the use of complementary funds.

• Stimulate and animate the territories, collecting their potentialities, needs and critical issues.

• Promote dialogue between local subjects and central structures, for a greater balance between the needs of the territories and the objectives of the institutions.

Activities carried out

Despite some changes during the 8 years of project, the structure of Technical Facilitators' team was essentially divided into two groups. One composed of 4 technicians, defined as "Transversal", with different skills in the botanical, faunal, hydrobiological and agronomic fields. A second second group of technicians, defined as "Territorial", was linked to specific planning areas of the Region.

Overall, the activities carried out can be traced back to these fundamental points:

• Research and monitoring of funds that can be used for biodiversity conservation.

• Involvement of stakeholders such as the managing bodies of the Natura 2000 network, local authorities, farmers and other public and private entities.

• Support in concrete activities aimed at protecting biodiversity, through the drafting and implementation of projects to be submitted to tenders.

- Collaboration with the Management Authorities of the various complementary funds. This activity was aimed at for the transfer within the new tenders of the needs and requirements emerging from the territory and from the Prioritized Action Framework of the Natura 2000 network.
- Active participation in the various concrete, monitoring and dissemination actions of the project.

• Promotion and dissemination of the results of the project through webinars, national and international conferences, meetings with the public, field trips, etc.





Results

Animation activities

Actions aimed at gathering the needs of the territory for the development of ideas and proposals for interventions aimed at safeguarding biodiversity, even in the absence of concrete financing possibilities:

- More than 180 in-person or online events organised;
- Presence of almost 2,000 participants.

Facilitation activities

Actions aimed at promoting funding opportunities for specific project ideas, with the objective of realising them through appropriate designs to be submitted to tenders:

- Around 400 in-person or online events organised.
- Presence of almost 1,000 participants.

Project activities

• Involvement of a wide range of funding sources, directly or indirectly aimed at biodiversity protection objectives: Rural Development Programme, regional funds, foundations, private funds etc.

• More than 400 projects submitted to tenders for a total potential supply, including financing and co-financing, of approximately 50 million euros.

• More than 300 projects with successful financing for an amount of almost 30 million euros.

Communication

Objective

Increase knowledge of Natura 2000 and the project activities among the general public, as well as sharing of activities and results among partners and stakeholders.

Activities carried out

- Creation of a project website (*https://naturachevale.it/*) and its constant updating.
- Facebook page and YouTube channel.
- · Drafting of contents relating to project actions or of
- interest to the project and the Natura 2000 network.
- Periodic newsletter.

• Organisation, once a year, of the States General of the Natura 2000 network in Lombardy, as a moment of meeting and discussion between the stakeholders. The format was that of a conference, with possible in-depth seminars.

- Production of information material on paper.
- Production of short videos, focusing on the concrete actions and good practices of the project.

Results

• The number of contents produced and then published online on the website and social media have constantly grown, reaching 50/60 contents on an annual basis in the last three years.

- The monthly average of unique visitors to the site saw constant growth and stood at 1,821 in 2022.
- The project's Facebook page, opened in 2018, has seen a constant growth in interactions, as evidenced by the evolution of "likes" on the page.



- The newsletters are published at least monthly, and subscribers have grown from 208 in 2019 to 674 today.
- Production of 9 short videos began on various topics of interest to the project (such as IAS, bats, amphibians, birds, etc.). The videos are published on the website and on the project's Facebook page. Almost all of the videos are available in a subtitled version in English.
- The States General of the Natura 2000 network in Lombardy have been held every year since 2016. Every year a specific topic has been identified for the discussion. The States General materials and records are available in the "Documents" section of the website.

The LIFE Programme

The LIFE Programme is the EU's financial instrument for environment and climate action. It has been bringing green ideas to life since 1992 and, to date, has co-financed over 5,500 projects in the EU and third Countries. For the period 2021-2027 the European Commission has increased funding of the LIFE Programme by almost 60%, up to an amount of 5.4 billion euros.

- The LIFE Programme aims to support the efforts with projects aimed to:
- Achieve the transition to a sustainable, circular, energy efficient, renewable energy-based, climate neutral and resilient economy.
- Protect, restore and improve the quality of the environment, including air, water and soil.
- Halt and reverse the loss of biodiversity and counteract the degradation of ecosystems.

Its financial allocation is implemented through four subprogrammes:

- Nature and biodiversity.
- Circular economy and quality of life.
- Climate change mitigation and adaptation.
- Clean energy Transition.

The LIFE Programme is managed by the European Climate, Infrastructure and Environment Executive Agency (CINEA).





The Natura 2000 network

Natura 2000 is the main instrument of the European Union Policy for the conservation of biodiversity. It is an ecological network spread across the entire territory of the Union, established in the framework of the "Habitats" Directive (92/43/EEC) to guarantee the long-term maintenance of natural habitats and threatened or rare species of flora and fauna at community level.

The Natura 2000 network is made up of Sites of Community Interest (SCI), identified by the Member States as established by the Habitats Directive, which are subsequently designated as Special Areas of Conservation (SAC), and Special Protection Areas (SPAs), established in the framework of the "Birds" Directive (2009/147/EC).

As the Habitats Directive intends to guarantee the protection of nature also taking into account "economic, social and cultural requirements and regional and local characteristics" (Art. 2), human activities are not excluded from the Natura 2000 sites. Private individuals can own land inside the Natura 2000 sites, ensuring their sustainable management from both an ecological and economic point of view.

The Directive recognizes the value of all those areas where the centuries-old presence of man and his traditional activities has allowed the maintenance of a balance between anthropic activities and nature. Agricultural areas, for example, are linked to numerous now rare and threatened animal and plant species whose survival requires the continuation and valorisation of traditional activities, such as grazing or non-intensive agriculture. The same title of the Directive specifies the objective of conserving not only natural habitats but also semi-natural ones (such as areas of traditional agriculture, used forests, pastures, etc.).

Another innovative element is the recognition of the importance of some landscape elements that play a connecting role for wild flora and fauna (art. 10). Member States are invited to maintain or, where necessary, develop these elements to improve the ecological coherence of the Natura 2000 network.

In Italy, the SCI, SACs and SPAs cover a total of approximately 19% of the national terrestrial territory and more than 13% of the marine territory.





www.naturachevale.it www.regione.lombardia.it



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