

Action plan for the conservation of the lynx (*Lynx lynx*) in the Italian Alps - Draft Report (Chapter 4.2.). 1-9. IEA - Istituto di Ecologia Applicata, for WWF Italy.

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Abstract: The draft presents the objectives of the action plan for the lynx in the Italian Alps. The ultimate aim of this action plan is the recovering and maintenance, coexisting with humans, of a viable lynx population as an integral part of the Alpine landscapes and ecosystems. For this aim to be feasible, the following specific objectives have to be achieved: (1) facilitate and allow the recovery, stabilization, growth and maintaining of the lynx in suitable areas of the entire Alpine region (2) achieve a sustainable compromise between the conservation needs of the lynx and human needs of developing and maintaining economic activities (including hunting) (3) achieve international collaboration that allows unitary and standardized management of the whole Alpine lynx population.



**ACTION PLAN FOR CONSERVATION  
OF THE LYNX (*Lynx lynx*)  
IN THE ITALIAN ALPS**

**DRAFT**

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## 4.2 OPERATIONAL PROGRAMME

The ultimate aim of this action plan is **the recovering and maintenance, coexisting with humans, of a viable population of lynxes as an integral part of the Alpine landscapes and ecosystems**, where *viable* refers to a number of lynxes which safeguards the population from the probability of extinction due to genetic causes, population probability and degradation of the habitats.

For this aim to be feasible, the following specific objectives have to be achieved:

- facilitate and allow the recovery, stabilisation, growth and maintaining of the lynx in suitable areas of the entire Alpine region;
- achieve a sustainable compromise between the conservation needs of the lynx and human needs of developing and maintaining economic activities (including hunting);
- achieve international collaboration that allows unitary and standardised management of the whole Alpine lynx population.

These objectives can in turn be achieved through a series of joint and integrated actions (holistic approach) which, both from an operational and descriptive viewpoint, can be grouped together according to the various perspectives that best describe the problem (*cf. par. 3*).

In a time context it should be underlined that the long-term objective of conserving a viable population of lynxes in the Alps could presumably require many years, possibly even decades. However, given the precarious situation of the populations currently found in the Italian Alpine area, some immediate measures of environmental redevelopment, effective protection in the areas of presence, compatible development and communication with the local communities could effectively speed up the process. Thus a well-planned and multidisciplinary approach should immediately be brought into action.

In the light of the most typical factors of the problem of conservation of lynxes in the Alps (*cf. par. 3*), and according to the strategy and philosophy of a conservation policy and the possible technical solutions (*cf. par. 4.1*), the following conservation actions have been identified (*par. 4.2.1 – 4.2.9*).

### 4.2.1 Actions for increasing survival and recovery of the lynxes currently present in Italy

- 4.2.1.1 Definition of the status, distribution and dynamics of the permanent units of lynx in the Alpine region.
- 4.2.1.2 Identification and mitigation of the factors limiting reproduction, survival, density and growth of the lynx in the present permanent units.
- 4.2.1.3 Ascertaining of the identity, variability and genetic relationships of the lynxes in the Italian Alpine region with other lynx populations in Europe.
- 4.2.1.4 Ascertaining of the feasibility and priority of possible schemes of translocation into potentially suitable areas in order to facilitate the achieving and maintaining of a viable metapopulation in the entire Alpine region.

#### **4.2.2 Actions for ensuring suitable habitat conditions for the migration and spontaneous recolonisation of lynxes from Slovenia, Austria and Switzerland**

- 4.2.2.1 Identification, safeguarding and redevelopment of the main corridor areas between the suitable areas for the lynx in the entire Alpine region and possible source populations (France, Switzerland, Austria, Slovenia).
- 4.2.2.2 Analysis of the existing infrastructures throughout the Alpine region and valuation of their potential effect as regards expansion of the lynx population.
- 4.2.2.3 Within the corridor zones identified (4.2.1.1), redefinition of the systems of safeguarding and use (hunting, forestry, agriculture, town-planning and tourism) and mitigation of the effect of potential barriers.
- 4.2.2.4 Performance of environmental redevelopment schemes (management of forests, recovery of the populations of wild ungulates) in the areas into which the main corridor zones lead.
- 4.2.2.5 Monitoring of migration indices and their integration on a G.I.S. basis.

#### **4.2.3 Actions for ensuring the suitable habitat conditions in the Alps capable of sustaining a viable metapopulation of lynx**

- 4.2.3.1 Development and optimisation of interpretation models on a G.I.S. basis.
- 4.2.3.2 Valuation of the suitability of the habitat on a large scale.
- 4.2.3.3 Estimation of the suitability of the habitat within the protected areas and the planning of ecological redevelopment (management of forests and wild ungulates) where necessary for increasing the extent of the protected areas as a means of conservation of the lynx.
- 4.2.3.4 Analysis of the relationship between configuration, extent and location of an interconnected system of critical areas and the viability of an Alpine metapopulation of lynxes.
- 4.2.3.5 Execution of habitat redevelopment schemes via a priority scale in order to optimise efforts and with precedence given to the contact zones for recolonisation.
- 4.2.3.6 Redefinition of systems of safeguarding and use (hunting, forestry, agriculture, town-planning and tourism) of the suitable areas identified, with special emphasis on the key conservation areas.
- 4.2.3.7 Promotion of surveillance structures for an effective and constant control of the territory and prevention of poaching, with special emphasis on the key conservation areas.
- 4.2.3.8 Analysis of the infrastructures and valuation of their potential effect.

#### **4.2.4 Actions for facilitating solutions of compatible development and coexistence between the lynx and human-related activities**

- 4.2.4.1 Identification of the basic parameters of local economic development and their trends, above all in relation to the activities potentially linked to the environment used by the lynx.
- 4.2.4.2 Evaluation of the importance and effect of agricultural aid policies (subsidies) on local economic activities and the ways of exploiting natural resources and preparation of a different, economically and administratively feasible, proposal to provide economic and structural support for local activities.
- 4.2.4.3 Calculation, via models and projections, of the potential effect of the lynx on local economies (direct and indirect costs, benefits, spin-offs etc.).

- 4.2.4.4 Performance of a costs-benefits analysis from the socio-economic standpoint of the local populations of any plans for release and/or translocation of lynxes.
- 4.2.4.5 Gaining of consensus for recognising the lynx as one of the components of the system of local resources and, particularly by hunting associations, an important component of Alpine ecosystems.

#### **4.2.5 Actions for preventing and mitigating conflict with humans**

- 4.2.5.1 Planning and creation of a system of compensation for the damage caused by the lynx to livestock which must: *a)* provide incentives for the implementation of prevention structures; *b)* be conservative, restricting payment of compensation to the use of preventive measures, and *c)* adopt a single model in all the regions where the lynx is found.
- 4.2.5.2 Setting up of a programme of economic incentives to allocate to those who breed livestock in areas where the presence of the lynx is considered critical: the incentives depend on the implementation of means of prevention of damage, and are directly proportional to the survival and reproduction success of the lynx in the zone.
- 4.2.5.3 Creation of a group of experts capable of providing assistance and advice for breeders interested in the use of prevention structures and breeding methods more in line with the presence of the lynx in the area.
- 4.2.5.4 Foreseeing, via the intervention of the technical task force, and only subsequent to approval by the technical committee (cf. 4.2.8.3.), of the possibility of capturing and/or removing lynxes with a particular tendency towards predation of domestic livestock.
- 4.2.5.5 In the areas of permanent lynx presence, revising of hunting schedules in light of the composition and size of populations of wild ungulates, the needs and culling of lynx carried out.
- 4.2.5.6 In agreement with the hunting associations, and only with the consensus of the technical committee, foreseeing of the possibility of culling of the lynx by hunting only where dynamic and where the size of local units make it feasible and without jeopardising the viability of the species on a local and Alpine scale.

#### **4.2.6 Actions for allowing and facilitating involvement of the relevant groups and the public in conservation of the lynx in the Alps**

- 4.2.6.1 Planning of the resources (financial, staff, time) for initiating and maintaining regular and close contact with the local populations and, in particular, relevant groups.
- 4.2.6.2 Organisation of training and discussion seminars with the relevant groups (livestock breeders, foresters, hunters), particularly in areas where the lynx is present, foreseeing the need to participate, via their representatives, in the co-participation decision-making processes relating to management of the lynx in the Alps.
- 4.2.6.3 Extending of the alliances to social brackets and relevant groups normally not directly involved in the management of natural resources (including the lynx).
- 4.2.6.4 Establishing of a consultation protocol with the local populations to discuss and implement the indications of the action plan.
- 4.2.6.5 Making sure that no decision on intervention on natural resources, which directly or indirectly involves the lynx, can be made without preliminary co-participation of all social groups.

4.2.6.6 Preliminary and joint discussion of the proposals for intervention on new infrastructures (forest roads, housing), hunting and farming, tourism and forestry.

**4.2.7 Actions for improving the attitude of the public and of the relevant groups in respect of the lynx**

4.2.7.1 Performance of a detailed analysis of the attitude of public opinion in respect of the lynx and other natural resources.

4.2.7.2 Identification of the different relevant targets, valuation of their attitude and their level of knowledge concerning the lynx and the relevant management problems, and execution of ad hoc awareness-raising campaigns.

4.2.7.3 Identification within the individual relevant groups (livestock breeders, beekeepers, tour operators, foresters etc.) of influential representatives capable of informing within their category on the implications of the action plan.

4.2.7.4 Promotion of information and instruction of the public on the subjects of the lynx, also with methods selected according to age and relevant groups (press campaigns, radio – TV).

4.2.7.5 Transformation of the lynx into a positive symbol of economic revival of the area, incorporating it in tourist publicity and advertising.

4.2.7.6 Preparation of an educational kit on the conservation of the lynx that can be distributed in large numbers to schools and students.

4.2.7.7 Organisation of regular meetings with teachers to prepare them for a more effective action of information on the lynx, and a permanent network for exchange of information and experiences.

4.2.7.8 Periodical valuation of the extent and efficacy of the education and awareness-raising campaigns.

**4.2.8 Actions for improving the administrative and management context for conservation of the lynx**

4.2.8.1 Creation of an institutional and decision-making structure in line with the action plan.

4.2.8.2 Organisation of a services conference which constitutes the initial forum of the new organisational structure, with participation, initially, of NGOs, conservationists, biologists, representatives from local (regional and provincial) and central authorities (ministry), representing the relevant groups.

4.2.8.3 Taking steps so that the ministry for the environment sets up a technical committee for coordination of conservation of the lynx in the Alps with all the representatives participating in the services conference and with the task of supervising and ensuring the implementation and constant updating of the action plan.

4.2.8.4 Assignment and recognition for this committee of the role of authority in charge of unitarily handling the problem of conservation of the lynx in the Alpine region and of indicating the guidelines for its fulfilment.

4.2.8.5 Signing of an agreement protocol between all the institutions and organisations (provincial and regional authorities, NGOs, trade associations), possibly also including an advanced version of the action plan.

4.2.8.6 Setting up at a provincial level of advisory committees for conservation of the lynx, with the representation of all the applicant categories, ensuring that all the members are present and organising its meetings on a regular basis, at least annually.



- 4.2.8.7 Examination of the regional and provincial laws to ascertain their congruity with the action plan and propose changes and additions in view of the means required for applying the plan.
- 4.2.8.8 Ascertaining that the NGOs (national and local) share in the new co-participation approach and redefinition of their role, assigning the tasks which are best suited to the capabilities of each organisation: the NGOs must take charge of performing specific programmes within the plan, in particular in the role of link between institutions and local communities and careful monitors of the compliance between programmes and actions.
- 4.2.8.9 Setting up of a group of experts on the biology of the lynx and the techniques for reduction of conflict; the main aim of the group is to act as mediator with local populations, in particular hunters and breeders, to facilitate coexistence with the lynx and reduce opportunities for conflict. The group will also be involved in coordinating monitoring of the species in the area and will be composed of biologists and researchers who shall maintain regular contact with the local populations (informal meetings, presentations and public debates, assistance and advice for local governments etc.).
- 4.2.8.10 Identification, structuring and setting up of groups of two or three persons per province in the role of publicity agents/assistants in contact with the local communities on the subject of prevention of damage, conservation of the species, benefits and possible opportunities, the procedures for requesting compensation and subsidies, and the need to take an active part in decision-making processes. These groups shall work in close contact with the group of experts.
- 4.2.8.11 Training of the forestry and provincial guards in the methods of monitoring the presence of the lynx in the area, and in checking for damage to livestock and prevention techniques.
- 4.2.8.12 Publication of a regular newsletter aimed at the general public and edited by the secretariat of the technical committee for the lynx, which periodically (half-yearly) gives information on management of the lynx.
- 4.2.8.13 Coordination of the lynx conservation actions with those indicated by the action plans for the wolf and bear in the Alpine region.
- 4.2.8.14 Active participation in the new programme of the Bern Convention for application at a national and regional level of the European action plans for all the species most threatened.
- 4.2.8.15 Continuation of urging commitment by the European Union in supporting the lynx conservation actions with structural actions: in particular a study should be made of all the opportunities which the various EU programmes (Life, Interreg, structural funds, etc.) offer for the performance of actions planned or compatible with this plan.
- 4.2.8.16 Establishing of a form of formal and institutional contact with the countries bordering on the Alpine region in relation to conservation of the lynx, and ensuring that the programmes of management and conservation of the species are harmonized.

#### **4.2.9 Actions for promoting and maintaining monitoring and research programmes**

- 4.2.9.1 Establishing of a form of permanent collaboration between all those who deal with monitoring and research of the lynx in the Alps.
- 4.2.9.2 Definition of standardised protocols for collecting data on the presence of the species in the entire Alpine region.
- 4.2.9.3 Creation of a single national and international Alpine data bank.
- 4.2.9.4 Programming and performance of a research plan aiming at providing essential data for valuating the prospects of conservation of the lynx: a) extent, distribution and dynamics of

the units present in Italy, *b*) degree of connection between units of presence and viability of the Alpine metapopulation, *c*) use of the habitat and influence of infrastructures and human-related activities, *d*) use and efficiency of the corridor areas, *e*) methods and efficacy of the dispersal movements, *f*) validation of the environmental suitability models, *g*) effect of predation of the lynx on populations of hunting interest and, *h*) compatibility and regulation of hunting in the critical areas of presence of the lynx.

4.2.9.5 Efficient and consolidated monitoring of the quantity, quality and distribution of the damage caused by the lynx and experimentation of breeding techniques and prevention strategies.

#### **4.2.10 Actions for ensuring efficacy and adequacy of the action plan**

4.2.10.1 Implementation of the action plan in the short term, with decisive and ongoing performance of all the actions included in the plan itself, in synergy with the plans of action approved by the ministry for the environment on a national scale.

4.2.10.2 Preparation of a detailed schedule of actions, participants and responsibility, and ascertaining of its performance at least every two months.

4.2.10.3 Definition and optimisation of the critical institutional structures for continuation of the plan (lobby at the ministry and regional and provincial authorities involved).

4.2.10.4 Ensuring of provisional coordination of the activities until completion of the new decision-making system.

4.2.10.5 Identification of a first list of institutional participants and other categories which will be called upon to play a role within this plan.

4.2.10.6 Obtaining of long-term commitment by the national and regional governments.

4.2.10.7 Ensuring of the efficiency of the flexible and adaptive nature of the plan, programming, right from the start, periodical technical meetings (with the participation of all those involved until that time) to ascertain the congruity of the plan and change its indications to adapt better to the changes in knowledge and/or conditions.

4.2.10.8 Full revision of the action plan at least every three years.