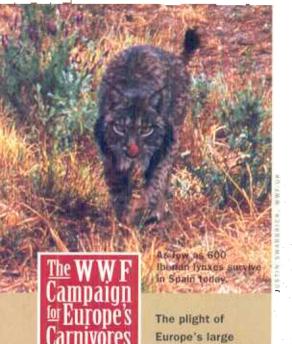
for the Iberian lynx?







carnivores has become an issue of increasing conservation concern. They continue to be persecuted by humans, and in many cases their habitats are under threat. While the precarious status of Asia's tigers is widely known, some of Europe's own top predators are in danger of quietly disappearing. Others face an upsurge in conflict with people as they attempt to reclaim parts of their former ranges. The WWF-UK Campaign for Europe's Carnivores aims to raise funds and awareness to support selected carnivores in Europe. None is in greater peril than the Iberian lynx.

Only saving the Iberian lynx from extinction will give Europe the moral authority to call for the conservation of biodiversity in other

parts of the world. The Iberian lynx Action Plan, 1999

The Iberian lynx (Lynx pardinus) is classified by IUCN (the World Conservation Union) as the world's most endangered feline species. The latest studies on its population size, which were carried out a decade ago, estimated a total of fewer than 1,150 animals in Spanish territory. The Portuguese population is much smaller at around 50. This report focuses mainly on the situation in Spain.

Since 1988, no complete assessment of the Iberian lynx's status has been undertaken, but different research studies have confirmed a progressive and alarming decrease in numbers. It is possible that the current population in Spain totals no more than 600. Map 2 on page four shows how the distribution of the Iberian lynx contracted by almost 80 per cent from the 1960s to the end of the 1980s. The current range of the species is thought to be even more limited than that shown for 1988.

The main Iberian lynx populations (estimated at 350-450 animals) are located in the Sierra Morena, Montes de Toledo and Villuercas mountains in central-southern Spain, in the adjacent regions of Andalucía, Castilla La Mancha and Extremadura. Only a small proportion of these populations occurs within legally protected

areas. Most survive on large private estates devoted to shooting (principally red deer and some small game) and livestock raising, with the typical scrub, forest and grassland vegetation of the Mediterranean uplands. All the other populations have fewer than 100 individuals – for example in and around Doñana National Park in Andalucía (40-50) and in northwest Extremadura on the border with Portugal (75-95).

A BRIEF DESCRIPTION OF THE IBERIAN LYNX

The Iberian lynx is a different species from the lynx found in other parts of Europe. It is a smaller animal, with adults measuring around one metre in length and weighing between 10kg and 15kg at the most. The Iberian lynx has long legs, a short tail with a black tip and a characteristic set of whiskers around its face. Its coat is tawny with dark spots. It is a specialised feeder, with rabbits accounting for more than 80 per cent of its diet. Similarly, the Iberian lynx is a habitat specialist, preferring a mosaic of Mediterranean woodland (characterised by evergreen oaks) and scrub, which provide essential cover, grassland, and grazing for rabbits.

Why is the Iberian lynx heading towards extinction?

In 1998, the Large Carnivore Initiative for Europe (LCIE), with funding from WWF, produced a comprehensive review of the current status of the Iberian lynx, the threats to its survival and the measures needed to ensure its conservation: *The Iberian Lynx Action Plan*¹.

The Action Plan, revised in 1999, highlights a range of factors that continue to drive the Iberian lynx relentlessly towards extinction.

A key problem has been the dramatic decline in rabbit populations caused by myxomatosis since the 1950s and by Rabbit Haemorrhagic Disease (RHD) since the late 1980s. However, human activities have critically compounded the problem of prey scarcity. Some of the most widespread and persistent activities, which threaten the lynx, include:

HABITAT DETERIORATION

The conservation of Mediterranean forest, scrub and grassland is perfectly compatible with human activities such as livestock raising, deer and small-game shooting, forestry and tourism, if these are appropriately managed. However, in recent years the uncontrolled intensification of these activities has led to severe impacts on the lynx's favoured habitat. Notable examples include the overstocking of deer and livestock, the erection of unsuitable deer fencing and the opening up of roads and forest tracks in previously remote areas. In addition, the habitat mosaic favoured by the lynx has suffered at the hands of afforestation and scrub-clearance schemes, roadbuilding programmes, dam construction and the building of holiday homes.

FRAGMENTATION OF POPULATIONS

The fragmentation of lynx populations is a fundamental threat to their survival. There are nine separate populations in Spain and Portugal that are themselves divided into 48 breeding areas. All but one population have fewer than 100 animals and some have fewer than 10 females, making them extremely vulnerable to sudden extinction due to variations in fertility, disease etc. In addition, genetic in-breeding is a very serious threat to the survival of many Iberian lynx populations.

New roads, dams and other construction projects continue to fragment the surviving lynx populations and create new barriers in "corridor" areas between populations. Increasingly heavy and fast traffic takes its toll of lynxes each year, as the animals venture away from their areas of birth in search of new habitats and try to cross roads which have usually been designed without tunnels or other features to improve their "permeability" for wildlife. There are certain hotspots, such as in Doñana, where road deaths are a particularly important threat to the surviving lynx population.

In addition, the landscape between many of the species' remaining breeding areas has suffered from a continuous process of degradation since the 1970s which reduces the lynx's chances of moving from one area to another. In particular, the loss of features such as hedges, riverine woodlands and patches of scrub makes it more difficult for this cover-seeking animal to venture away from its home base and establish new populations.

INDISCRIMINATE TRAPPING AND SHOOTING ON HUNTING ESTATES

Many Iberian lynxes are killed each year by traps, snares and shooting. Traps and snares set by game-keepers for controlling predators such as foxes or for trapping rabbits are thought to account for over 60 per cent of human-induced lynx deaths. Although predator control

with certain selective methods (such as cage traps) is allowed during specific periods in lynx areas. the LCIE Action Plan reports that the regulations on the type and number of traps which may be set "are violated almost systematically" and that "administrative



One of the many victims of illegal leg-hold snares.

control of these practices virtually does not exist". In fact, the large shooting estates that harbour the most important surviving lynx populations are often a law unto themselves. In many cases the often-absentee owners do not know how their estates are managed because the task is left to estate managers, gamekeepers and other employees.

Map 1: WWF PROPOSALS FOR SPECIAL AREAS OF CONSERVATION FOR LYNX IN SPAIN Areas excluded from the MAP 2: DISTRIBUTION OF THE IBERIAN LYNX Shooting of lynxes also still occurs in Spain and Portugal, although the species has been strictly protected by law in both countries since 1973 and 1974 respectively. For example, at least five lynxes have been shot in or around Doñana National Park in the past 15 years. Overall, shooting is thought to account for a quarter of all lynx deaths, although some cases may well go unreported. In addition, uncontrolled rabbit shooting exacerbates the problem of prey scarcity in some areas. Habitats Directive: can the Natura 2000

Lynx conservation in Spain: recent history and future prospects

As the country that harbours
95 per cent of the total Iberian lynx
population, Spain has a special
responsibility for the conservation
of this endemic European species.
Sadly, the efforts of the authorities
have until now have been completely
inadequate, and have served merely
to illustrate the critical situation in
which the lynx finds itself.

Since 1994, funding from the European LIFE programme has enabled further research and conservation projects to be undertaken, but these have done little to improve the situation. Projects have been localised and generally uncoordinated. The conservation project financed by LIFE in 1994-99 and run by the national regional governments had a total budget of around £1.9m. Interestingly, one kilometre of motorway costs almost as much (about £1.7m) and in the next few years the Spanish government proposes building 1,600 km of new motorway. The majority of motorways in Spain are partly financed by EU funds.

The 10 years that have passed since the 1988 Iberian lynx census highlighted the severely eroded and fragmented state of the population, have been most notable for the continuing degradation of lynx habitats at the hands of projects and programmes funded by the EU and the national government. They have also been marked by the failure of Spanish national and regional authorities to control damaging human activities within lynx areas.



The Iberian lynx was a common species a hundred years ago.

For example, CAP subsidies have directly promoted inappropriate afforestation of scrub and grassland habitats, scrub clearance, overstocking of livestock and the opening up of forest roads. The **EU Structural Funds for regional** development have been used for building roads and dams which have damaged, destroyed and fragmented lynx habitats. Ironically, some of the dams that are presently proposed or being built in lynx areas are partly "justified" by the water demands of irrigated crops, the economic viability of which depends entirely on CAP subsidies.

Meanwhile, opportunities to influence land management in lynx areas under schemes such as the CAP agri-environment programme have been ignored.

Until now, there has been no coherent network of protected areas for the Iberian lynx and no coordinated strategy for the species' conservation, either between Spain and Portugal or even between the Spanish regions. At last, this situation is beginning to change. Strategies are being established and

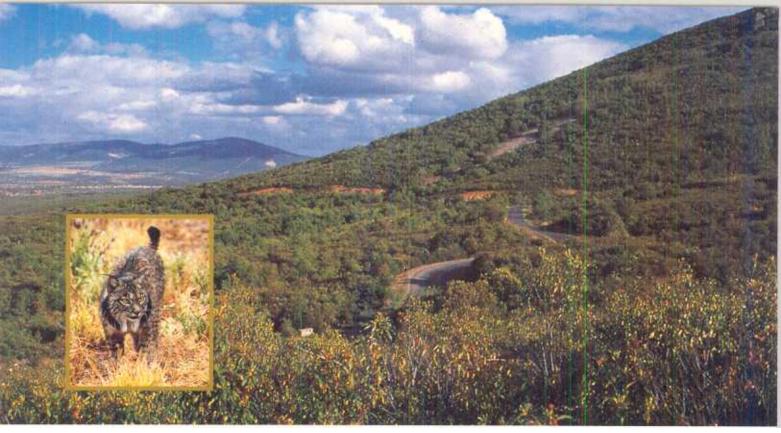
working groups set up to oversee their implementation. The Spanish government's strategy has many points in common with the LCIE Action Plan: the question now is when and how the good intentions set out in the strategy are to be implemented on the ground.

THE HABITATS DIRECTIVE AND NATURA 2000: NEW HOPE FOR THE IBERIAN LYNX?

By adopting the Habitats Directive² in 1992, the governments of the EU committed themselves to the creation of the Natura 2000 ecological network, with the aim of conserving an extensive range of European habitat types and wildlife species. In doing so, they set in motion potentially the most significant initiative for nature conservation in the history of Europe.

The Natura 2000 network will comprise Special Protection Areas for birds, designated under the Birds Directive³, and Special Areas of Conservation (SACs), which will be designated to conserve the habitats and species, including the Iberian lynx, identified in the Habitats Directive. In addition to the Natura 2000 network, Article 12 of the Directive commits the Member States to providing strict protection throughout their territory to a wide range of "species of Community interest" (also including the Iberian lynx), as well as to all their resting and breeding places.

The overarching aim of the Habitats Directive measures is to ensure a "favourable conservation status" for the species and habitats concerned. Article 1 of the Directive states that



Milagro Pass, in Montes de Toledo, where a road improvement project could seriously affect the lynx.

the conservation status of a species can be considered as "favourable" only when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a longterm basis as a viable component of its natural habitats;
- the natural range of the species is neither being reduced nor is likely to be reduced in the foreseeable future; and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

On the basis of this definition, the reality today is that the Iberian lynx is far from enjoying a favourable conservation status. In order to comply with the Habitats Directive, the Spanish and Portuguese governments will have to take serious steps to improve the situation of the species. This challenge is made clear by the authors of the LCIE Action Plan when they say that "the speed at which the Iberian lynx heads for extinction is so fast that drastic intervention is needed".

In many ways, the Iberian lynx can be considered to be the ultimate test case for the Habitats Directive: can the Natura 2000 network and the universal protection for the species provided by Article 12 of the Directive pull this endemic European species back from the brink of extinction?

At first glance, there is reason to be cautiously optimistic. Natura 2000 will establish a large network of protected areas for the lynx for the first time. Article 3.1 of the Habitats Directive requires that this network should be sufficient to enable the species to be "restored to a favourable conservation status in its natural range". Under Article 6 of the Directive, the Spanish and Portuguese governments are committed to protecting and managing effectively the areas selected for Natura 2000.

But in practice, much will depend on the effectiveness and urgency with which the national and regional governments set about meeting their commitments. Experience to date is not very encouraging. For a start, the Spanish and Portuguese governments are four years behind in the proposal of sites for designation as SACs (Special Areas of Conservation) under the Habitats Directive, as are nearly all other EU Member States (all proposals should have been delivered to the European Commission by June 1995).

Furthermore, the areas proposed are not considered by WWF to be sufficient to enable the Iberian lynx to be restored to a favourable conservation status. Map 1 on page four shows the areas which WWF believes must be included in Natura 2000 in Spain if this aim of the Habitats Directive is to be achieved. The areas (shown in yellow and red) have been drawn using a Geographic Information System (GIS) and follow the recommendations of the authors of the LCIE Action Plan - namely that conservation measures for the Iberian lynx need to be applied over an area exceeding the known distribution of the late 1980s which was already seriously fragmented.

If current trends continue, the Iberian lynx will probably disappear in the first half of the 21st century.

Miguel Delibes, author of The Iberian Lynx Action Plan

They also incorporate recommended corridors for linking isolated populations and areas with the potential for recolonisation or reintroduction of the species.

The map shows the results of overlapping the areas proposed by WWF with the sites proposed as SACs by the Spanish government: the yellow areas are included in the official proposals, but the red areas are not. The excluded areas contain important sites where the lynx was known to be present in the late 1980s, as well as vital corridor and expansion areas for the most important surviving populations.

Apart from the inadequacy of the official proposals for Natura 2000, several areas proposed by the Spanish government as SACs for the lynx are threatened by road and dam building projects, inappropriate land management, forest tracks and deer fencing, even though the Directive intended such sites to be strictly protected from June 1998. WWF-Spain has analysed the potential impact of planned infrastructure projects on the sites it proposes for inclusion in Natura 2000 and has found that the already fragmented network of areas used by the lynx population in Spain would be broken in 20 more places if all these plans go ahead.

It is very worrying that the Spanish government has not yet established a system for monitoring and controlling damaging practices and developments in proposed SACs. It is also not at all clear how Natura 2000 areas will be managed and conserved in Spain – in contrast to some countries (for example, the

UK and France) no initiative has yet been taken by the government to establish pilot projects for managing Natura 2000 sites. Active management is needed very urgently in lynx SACs to improve the quality of the habitat, restore rabbit populations and create effective "ecological corridors" between breeding areas. The Habitats Directive requires management plans and effective conservation measures in SACs from 2004 at the very latest.

To make matters worse, the provision under Article 12 of the Habitats Directive for preventing the deterioration of all resting and breeding places of species such as the lynx (not only inside the Natura 2000 network) has not been transposed into Spanish national law, as required from June 1994. Furthermore, regional governments, which are responsible for nature conservation under the Spanish Constitution, seem to have even less idea of this requirement than the national government.

In conclusion, the present situation is that the protection and conservation measures intended by the Habitats Directive for species such as the lynx are still very far from being established on the ground.

WWF'S VISION FOR CONSERVING THE IBERIAN LYNX UNDER THE HABITATS DIRECTIVE

WWF believes that the Habitats Directive presents an excellent opportunity for establishing and implementing an ambitious strategy that can save the lynx from extinction and re-establish a healthy population at least across the southern half of the Iberian Peninsula. Making this vision a reality needs the active commitment of the governments concerned, with the full support of EU institutions and participation of independent bodies such as NGOs, landowners and land managers. The basic elements of the WWF vision are:

 rapid designation of a full and coherent Natura 2000 network for the Iberian lynx, providing maximum continuity between existing populations where feasible, as well as potential expansion areas as explained above;



Road development at El Viso, in the Iberian lynx heartland of Sierra Morena

• effective protection and conservation of all Natura 2000 areas, with mechanisms to ensure the participation of local people and with sufficient funding for detailed management plans and conservation measures, such as management agreements with landowners, improvement of habitat and rabbit populations, and habitat restoration in corridor areas;

The Iberian lynx is the most threatened carnivore species in Europe and one of the most endangered mammal species in the world. The Iberian Lynx Action Plan. 1999

- remodelling of existing policies that influence land use in rural areas, such as CAP subsidies and infrastructure plans (especially road and dam construction), to take full account of the conservation needs of the lynx;
- strict protection of the species and its resting and reproduction areas, as required by the Habitats Directive. This requires much more effort from national and regional authorities to control illegal trapping and killing of lynxes, as well as to prevent the deterioration of lynx habitats.

Overall, it is essential that lynx conservation be taken into account in the design and implementation of government policies for rural and regional development. At present, these policies are all too often in conflict with the conservation of the lynx and other endangered species. It is a key part of WWF's vision that these powerful EU policies should be used to help promote a model of land use and development that favours the conservation of habitats and species, and that builds on natural values rather than destroying them.

At the time of writing, important opportunities are available to the Spanish and Portuguese governments to build ambitious conservation measures for the Iberian lynx into their programmes for spending under the EU Structural Funds in the period 2000-2006. In particular, the new Rural Development Regulation of the CAP could be used to promote more appropriate land management practices in lynx areas.

WHAT IS WWF DOING TO CONSERVE THE IBERIAN LYNX?

It goes without saying that saving the Iberian lynx from extinction is a priority objective for WWF in Europe. For many years, WWF-Spain has been campaigning against damaging infrastructure projects, working to reduce the impact of such projects, and raising awareness among landowners, hunters and gamekeepers in the main lynx areas so that persecution of the species is reduced. It has also been supporting research projects and lobbying the government to take more effective conservation action.

Now, with increased resources (thanks to WWF-UK and other donors inside and outside Spain), WWF-Spain is developing a more global approach to conserving the Iberian lynx. It has developed a range of actions that build on the proposals of the LCIE Action Plan, and opportunities such as the Habitats Directive and the government's new national strategy. These include:

• proposing a network of Natura

- 2000 sites for the Iberian lynx and lobbying to achieve full coverage in the final selection of areas for SAC designation;
- identifying the main threats to the Natura 2000 network using GIS and lobbying to prevent damaging developments from taking place;
- lobbying for full and effective implementation of all aspects of the Habitats Directive and for the integration of lynx conservation into other policy areas;
- researching and promoting appropriate management strategies for lynx areas;
- establishing management agreements with landowners in key pilot areas;
- awareness raising and training for land managers in lynx areas;
- lobbying for a ban on nonselective and illegal trapping and killing methods, and the development of locally applicable solutions to the problems of lynx mortality; and
- media campaigns to raise public awareness inside and outside Spain.

NOTES

- 1 The Iberian Lynx Action Plan was written by Spain's leading team of researchers on the species: Miguel Delibes, Alejandro Rodríguez and Pablo Ferreras.
- 2 Council Directive 92/43 of 21.5.1992 on the conservation of natural habitats and of wild fauna and flora.
- 3 Council Directive 79/409 of 2.4.1979 on the conservation of wild birds.

This report was written by Guy Beaufoy, an expert on EU policies, such as the Common Agricultural Policy and the Habitats Directive, and their implementation in Spain. He has an MSc in Rural Resources and Environmental Policy and has been working in Spain for the past eight years.



WWF conserves wildlife and the natural environment for present and future generations.

WWF-UK, Panda House Weyside Park Catteshall Lane Godalming Surrey GU7 1XR

Telephone: +44 (0)1483 426444 Website: www.wwf-uk.org WWF-Spain ADENA Santa Engracia 6-2° Izd. 28010 Madrid Telephone: +34 91 308 23 09/10

le: +34 91 308 23 09/1

A LAST CHANCE FOR THE IBERIAN LYNX?