

42
DRAFT BASED ON 1978 DATASHEET

SPANISH or PARDEL LYNX

ENDANGERED

Felis pardina (Temminck, 1824)

Order CARNIVORA

Family FELIDAE

SUMMARY Confined to isolated, mainly mountainous areas in central and southern Spain and Portugal. Estimated total population 1000-1500. Decline due to habitat loss, myxomatosis affecting its principal prey, the rabbit, and incidental killing, in traps set for rabbits and other game and during big and small game hunts, which account for about 35-50 lynx annually. Major threat is now habitat destruction by large-scale reforestation, particularly with eucalyptus and pines. Protected by law in Spain and Portugal. Occurs in the Donana National Park. Conservation of the species calls for strict management of reforestation programmes together with total prohibition of the use of traps, snares and poisons in areas where the lynx occurs.

DISTRIBUTION Spain and Portugal. Spain: central and southern regions, principal localities being: — the Montes de Toledo, with their numerous southern spurs, and Guadalupe; Sierra Morena and Sierra de Alcaraz; Sierras de Gata, Pena de Francia and Lagunilla; and the reserves in the delta of the Guadalquivir. Also a few other isolated places in the mid-south of Spain (1,4,5). Portugal: three main localities in east-central and southern regions: Serra de Malcata, a mountainous area close to the Spanish border, where the lynx is found over some 15,000 ha and probably in partial contact with the Sierra de Gata population in Spain; Contenda-Barrancos, where the lynx is similarly in contact with others across the border in the Picos de Aroche and Sierra de Aracena in the north of Huelva province; and the mainly Algarve ranges of Serra do Caldeirao, Serra de Monchique and Serra de Espinhaco de Cao. Some lynx may also persist in a small area in the extreme northeast (8,9). Formerly it occurred throughout the Iberian peninsula, possibly as far north as the Pyrenees (11). Kurten states that during the late Pleistocene the Pardel lynx occurred in central Europe where its range overlapped with that of the northern lynx Felis lynx (6).

POPULATION Estimated total of 1000-1500 for the whole Iberian peninsula (5). Numbers have steadily declined since the turn of the century, more quickly since the mid 1950s to 1960s when myxomatosis hit the rabbit population (4,9). In Spain in recent years the lynx has disappeared from large areas of Salamanca, Avila, Caceres, Badajoz and Toledo; largest concentrations now are approximately 600 in the Montes de Toledo area and about 300 in the Sierra Morena area (4,5). Numbers in Portugal are unknown but populations are much fragmented and probably slowly declining after a more rapid decline in the 1940s to 1960s, but probably least scarce in the Serra de Malcata (9).

HABITAT AND ECOLOGY Inhabits thicket, which is not too dense (Cistus, Erica, Halimium, Ulex, Phillyrea etc.), e.g. with scattered rocks or trees, including woodland of Quercus pyrenaica, Q. suber, Q. ille, Q. rotundifolia, Pinus pinea etc. Such woodland allows suitable understory thicket to persist: in woodland without thicket the lynx does not occur nor where the understory is excessively dense, since there is then no longer a suitable habitat for its main prey, the rabbit Oryctolagus cuniculus (5,8,9).

72
Several studies have shown the lynx to be very dependant on the rabbit and Rogers suggests that the two species may have evolved an ecological interdependence similar to that between Felis canadensis and evolved an ecological interdependence similar to that between Felis canadensis and the snow-shoe hare Lepus americanus (2,10). The altitude range of the lynx is from sea level (Donana National Park) to about 1600 m (Sierra Pena de Francia) but mainly between 400 and 900 m. 2-3 young are born after a gestation of 63-73 days (1,2,5,12).

THREATS TO SURVIVAL Throughout the Iberian peninsula the decline of the lynx, beginning in the early part of the century with the progressive replacement of goat-herding (an activity favouring maintenance of rabbit habitat) by cereal cultivation, has greatly accelerated since 1955-60 with the decimation of rabbits by myxomatosis (2,4,9). The principal threat is now habitat loss caused by reforestation, particularly with eucalyptus and pines, which has again tended to reduce rabbit numbers and is adversely affecting virtually all lynx populations in Portugal, and in Spain those of Salamanca, Caceres, Badajoz and Huelva (4,9). In Portugal the Serra de Malcata, which until 1975 was the least disturbed lynx area, is now severely threatened by plans for reforestation with pines which will destroy about half the natural habitat of the lynx (9). The Serra de Monchique, which was until recently covered by large expanses of Arbutus, Erica and Cistus, has become a large eucalyptus plantation with lynx only surviving in small areas still covered by thicket (9). Large-scale snaring of rabbits is incidentally killing at least 25-30 lynx annually in the Montes de Toledo and Sierra Morena areas, Spain (4,13); poison baits set for foxes, genets, martens and crows account for other deaths (4), though this use of poison is forbidden in Portugal. About 10-20 lynxes are illegally shot every year by game hunters, usually by chance when after deer, wild boar, rabbits or partridges (5,9). Water impoundments such as the Alcantara and Torrejon-Tietar dams have split some lynx populations. For example, the population of about 15 pairs in the Sierras de Serrejon, Malpartida de Plasencia and Serradilla, which was an extension of the populations of Villuercas and Guadalupe Sierras, has been isolated by the Torrejon-Tajo dam (4), its chance of survival being thereby lessened (2,4).

CONSERVATION MEASURES TAKEN The Pardel lynx is listed in Appendix 2 of the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora, trade in it or its products therefore being subject to regulation and monitoring by parties at the Convention. Protected by law in Spain and Portugal, although every year at least 35-50 are unlawfully killed, usually in traps or during big and small game hunts. In 1968 the Spanish Government accepted 'ultimate responsibility' for the conservation of the species; it is regularly seen in the Donana National Park (350 sq. km), and also occurs in Las Batuecas National Hunting Reserve (Salamanca). The Montfrague National Park, due to be established in 1978, shelters another small lynx population of the Caceres Province (5,9).

CONSERVATION MEASURES PROPOSED Stricter control of forest planting in lynx habitat, specially in such important lynx strongholds as Malcata in Portugal, and prohibition of traps, snares and poisons in lynx localities. Ancillary measures might well include increased fines for illegal hunting or capture of the lynx and boosting of rabbit numbers by creation and management of more areas of suitable habitat (4).

202
CAPTIVE BREEDING No information.

REMARKS For description of animal see (11). In 1976, 2 males and 4 females were held in 3 collections (7). The Pardo lynx is regarded by some authorities as a subspecies of Felis lynx (3) and both are also sometimes separated at generic level under the name Lynx. This data sheet was compiled with the assistance of M. Delibes, J. Garzon and L. Palma.

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