## STATUS SURVEY OF IBERIAN LYNX IN PORTUGAL

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Once widespread through the country, the Iberian lynx decline in Portugal was first documented during the 1950-ies. The first scientific report on the status of the species, published in 1980, pointed out to a fragmented distribution throughout five populations nuclei, a total meta-population of about 50 animals being estimated. From north to south, the identified nuclei were: Serra da Malcata, Contenda-Barrancos, Sado Valley and Caldeirão.

During the 1990-ies, a second national survey, based on personal interviews and postal inquiries, was conducted and the final report pointed out to a meta-population of about 50 adult lynxes. According to this study, Portuguese lynx populations occupied hilly or mountainous countryland and some lowland pockets of the south and central regions. Most important populations were located in Algarvian mountains and Sado Valley (26-31 individuals estimated) and Serra da Malcata (7-9 lynxes estimated). During the same period, several field studies were conducted, in the two referred areas, with the objective of detecting lynx. Scent stations surveys, hair snares, camera trapping, box and leg-hold trapping, snow tracking and DNA analysis of potential scats revealed a situation that was incompatible with the estimated numbers using sighting data. In Serra da Malcata last DNA analysis confirmed scats were obtained in 1997 and in the Algarvian mountains no reliable proofs have been obtained during the last 10 years.

In the beginning of 2002, a national survey was started using 10x10 UTM squares as a geographic framework base. Suitable scrubland areas were searched for collecting potential lynx scats, rabbit density data and evaluating habitat suitability. The main objectives of this survey were: 1) To design a baseline of status and distribution of the species for result comparison of subsequent surveys on a national scale; 2) To develop a simple and reliable method of collecting information to facilitate future surveys; 3) To select potential areas for capturing founders for the Iberian lynx captive breeding programme.

From January to July 2002, a total of 1700 linear km was surveyed and 147 potential scats were collected, 78 of these (53%) being submitted to DNA analysis with no positive results. At the same time, camera trapping and box trapping, performed in most suitable areas, were unable to detected lynx presence. The obtained results with an HIS model, using Mediterranean scrubland cover area and rabbit density as environmental variables, allowed to identify one single area with a carrying capacity for a viable population. This area, located in the southern part of the Guadiana Valley, is presently being submitted to an intensive detection effort and probably constitutes the last possible lynx occurrence area in Portugal. Until now, the on-going survey was ineffective to detect lynx and the present situation seems to be extremely negative. Within this context, the implementation and success of the captive breeding programme could be critical for preventing the disappearance of this species in Portuguese territory.