

DISTRIBUTION OF WILD BOAR (*Sus scrofa*) IN PIEDMONT AND AOSTA VALLEY (NW ITALY)

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Abstract: The authors analyse the distribution of Wild boar in Piedmont and Aosta Valley (NW Italy) on the basis of data collected from 1989 to 1993.

Keywords: Wild boar, *Sus scrofa*, Suidae, Distribution, Europe.

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1. Introduction

Wild boar disappeared from North-West Italy at the beginning of the 19th century (De Beaux & Festa, 1927). After about a century the species reappeared in Piedmont owing to migration of individuals from France (De Beaux & Festa, *op. cit.*); afterwards artificial restocking contributed to its re-colonization of Piedmont and Aosta Valley.

Data concerning the distribution of Wild boar in the area during the past have been reported by Ghigi (1950), VV.AA. (1981) and Pavan & Mazzoldi (1983) (Fig. 1).

The aim of this study was to verify the present distribution of the species in Piedmont and Aosta Valley, according to new data collected from 1989 to 1993 for the Italian Mammal Atlas Project (Prigioni *et al.*, 1991).

2. Study area

Study area (Fig. 2) consists of Piedmont and Aosta Valley regional territories, for a total of about 2.87 millions ha. It can be divided into four main geographical parts: Alps (areas with alpine peaks above 1,500 m u.s.l.), Pre-Alps (areas skirting the alpine foothills with peaks

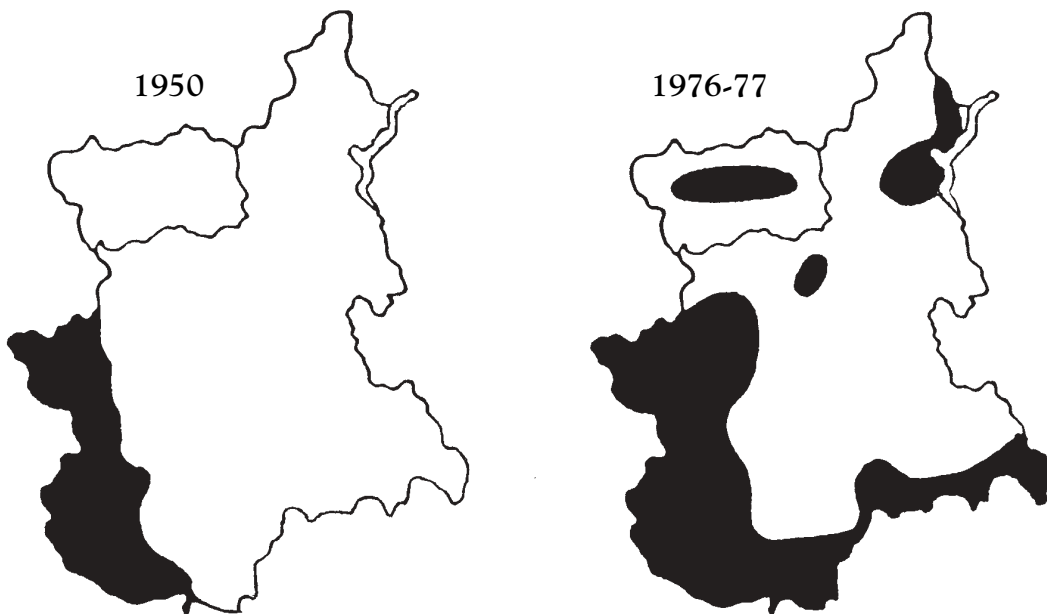


Figure 1 - Wild boar distribution in 1950 (Ghigi, 1950) and in 1976-77 (VV. AA., 1981; Paran & Mazzoldi, 1983)

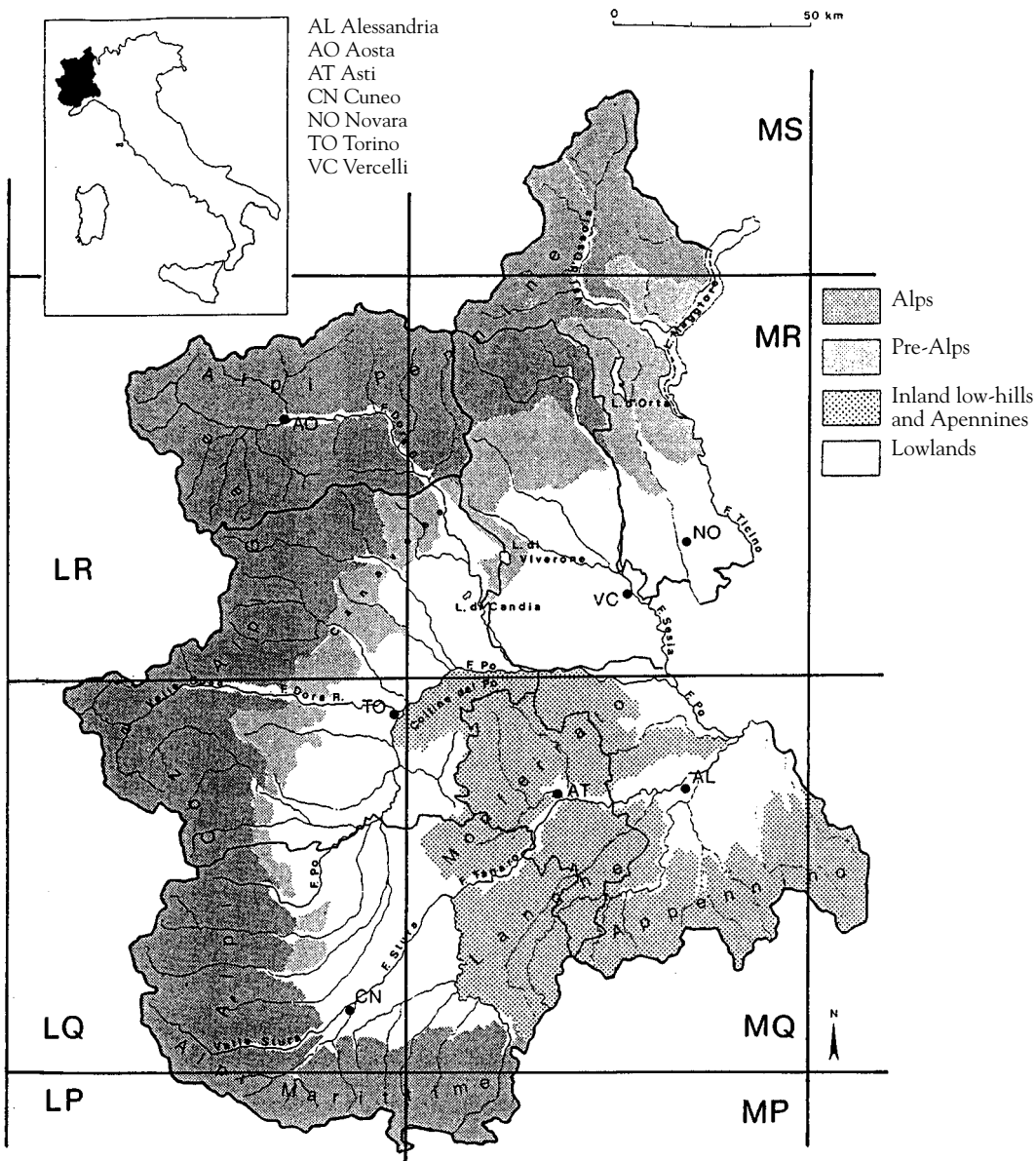


Figure 2 - Study area. Physical map of the two regions and main towns (from Mingozi et al., 1988, modified). Squares identification according to UTM 100 km grid.

not higher than 1,500 m u.s.l.), Inland low-hills and Apennines (Po Hills and Monferrato, Langhe and Apennines uplands) and Lowlands (lowland areas and wide alpine valley floors of altitude not over 600 m u.s.l.). 35.47% of the area is occupied by forests, 44.08% by fields and grazing lands (ISTAT, 1993).

3. Material and methods

2402 records of Wild boar presence have been collected, arising from:

- hunting (70.2%);
- sightings (8.2%);
- signs of presence, crop damages (20.1%);
- road casualties (1.5%).

Distribution of Wild boar in the study area has been mapped using 10 km squares of the UTM grid (Universal Transverse Mercator projection). Recorders (people and organizations) who have contributed records are listed in appendix.

4. Results

Wild boar was recorded on 214 of the 346 grid squares of the study area (Fig. 3). The maximum altitude record has been collected at 2,600 m u.s.l. (P.ta Lunella, Usseglio, Viù Valley, Turin), the minimum at 102 m u.s.l. (Loc. Fabbriche, Solero, Alessandria).

The sharing of records according to the four main geographical parts of the study area does not significantly differ from their availability ($\chi^2 = 1.120$, d.f. = 3, $p > 0.5$; Fig. 4), confirming the ecological adaptability of the species.

In comparison with the distribution registered in 1976-77 (VV.AA., *op. cit.*; Pavan & Mazzoldi, *op. cit.*) Wild boar has widely extended its range.

At present, Piedmont and Aosta Valley appear entirely re-colonized by the species, with the exception of the alpine area of the province of Novara.

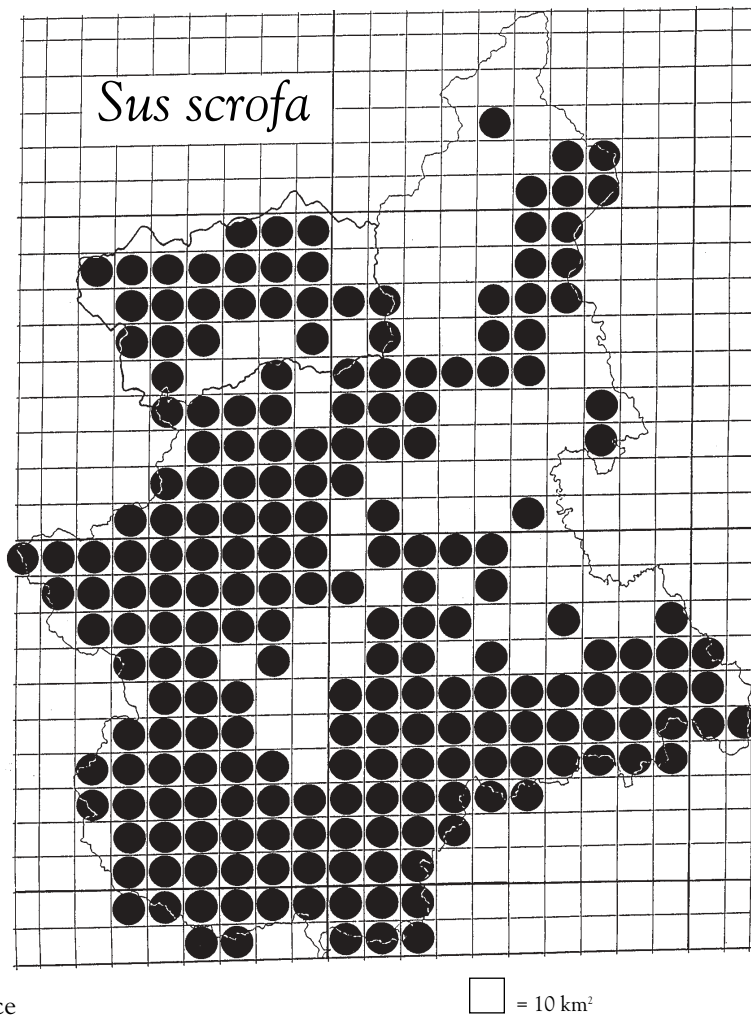


Figure 3 - Wild boar coverage map on the basis of data collected from 1989 to 1993

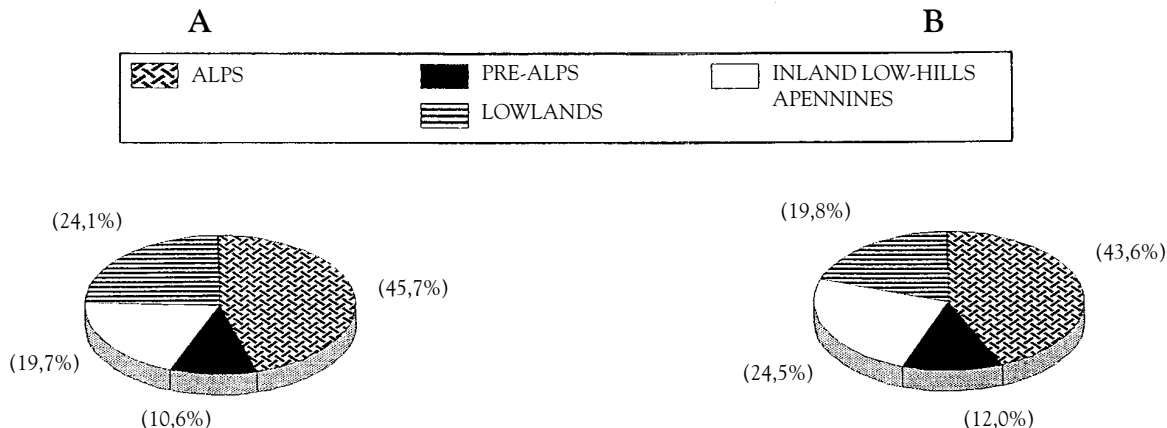


Figure 4 - UTM grid squares availability (percent of the total surface) in relation to the geographical features of the study area (A) and their use by Wild boar (B)

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APPENDIX

Recorders:

Foresters of Alessandria, Alessandria Provincial Government, Asti Provincial Government, Cuneo Provincial Government, Novara Provincial Government, Torino Provincial Government, Vercelli Provincial Government, Baratti N., Bassano B., Bertolino S., Blondin M., Boano G., Canepari M., Cout G., Debernardi P., Durio P., Janavel R., Gallo Orsi U., Gennaro A., Grosso M., Macchi E., Mangini V., Orellier P., Laghi di Avigliana Natural Park, Orsiera-