WILD BOAR ROOTING SITE CHARACTERISTICS AT THE LANDSCAPE LEVEL IN HIGH MOUNTAIN PASTURES OF WESTERN PYRENEES

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In 2000-2001 a noticeable wild boar rooting activity was detected in the Vallée d’Aspe (Parc National del Pyrénées, PNP). In order to evaluate damages on pastures and ecologically characterise these rooted areas at the landscape level, we mapped during 2000-2002 all the non-forested rooted areas (RA) above 1100 m of altitude. Using a Geographical Information System, RA were sized and related to ecological and topographical factors as altitude, slope, exposition, vegetation, forest distance and human use (grazing or mown pastures).

Results were compared with the same variables and class intervals of non-rooted areas. RA in grazing pastures amount to 675 ha which represent 23% of the pastoral surface (Fig. 1). The actual rooting surface (bare soil) in RA is 36% and other perturbation types normally can be found (Fig. 2). Considering surface frequency RA showed a typical Poisson distribution, being 0.4-0.6 ha the mode interval (0.09 and 82.4 ha were the minimum and maximum values respectively) (Fig. 3). Mean RA surface in grazing pastures was larger than in mown meadows (1.95 ha versus 0.58 ha; t = 2.3; p < 0.03). RA surface was more abundant at 1200-1600 m elevation and at Southeast exposition, and was less abundant in steep slopes, >26 degrees (Fig. 4). 31% of RA occurred in the 100 - 200 m interval from the forest (Fig. 5).

We conclude that wild boar rooting seems to be related to factors connected with snow distribution and forest proximity.