Conference on Mediterranean populations of the genus *Alectoris*

ABSTRACT BOOK
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59
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Comparison of predictive and descriptive models in order to plan.the monitoring and research on the rock partridge (*Alectoris graeca*) in the north eastern Alps.

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Within the implementation of the Management Plan for the Alpi Carniche region (SPA IT3321001, SCI IT3320001, SCI IT3320002, SCI IT3320003, SCI IT3320004) and the realization of the monitoring plan referred to art. 8 of RL No. 7/2008 (Friuli Venezia Giulia) some predictive and descriptive models for the presence and abundance of rock partridge *Alectoris graeca saxatilis* have been developed and tested. During 2010 the monitoring plan has been carried out during the spring (play-back censuses) and the summer (pointing dog censuses) in 10 sample areas to assess the presence, abundance and reproductive success of the species. These areas have been identified through expert knowledge and predictive models developed by the superimposition on regional UTM 1x1 kilometer grid quadrants of some CORINE Biotopes habitat parameters (open vegetation coverage >50% and open + transitional vegetation coverage >80%) and slope (>10%) and elevation (1000-2200 m above sea level), subsequently ranked from 0 to 4 for a suitability index. The census results related to UTM quadrants (n = 46, 40% with the presence of partridges) and buffer areas (100 meters of radius) created from the locations of the observed animals and the transect points of the censuses (n = 89) have been described by linear selection models that contain habitat classes from the Habitat Map of Friuli Venezia Giulia (Map of the Nature at the scale 1:50.000, ISPRA 2009) and morphological characteristics such as slope, elevation and aspect. The descriptive models have selected different variables according to the season (reproductive and post-reproductive), identifying the presence of Eastern Alpine calcicolous larch with moorland as one of the most important variables to define habitat suitability. Moreover, the descriptive models that use the lesser spatial scale (100 m buffer) seemed to describe better the presence and abundance of this species. The predictive models however were inappropriate to describe the presence of this species and should be used with caution to plan the monitoring activities. The research was supported by the Friuli Venezia Giulia Autonomous Region.