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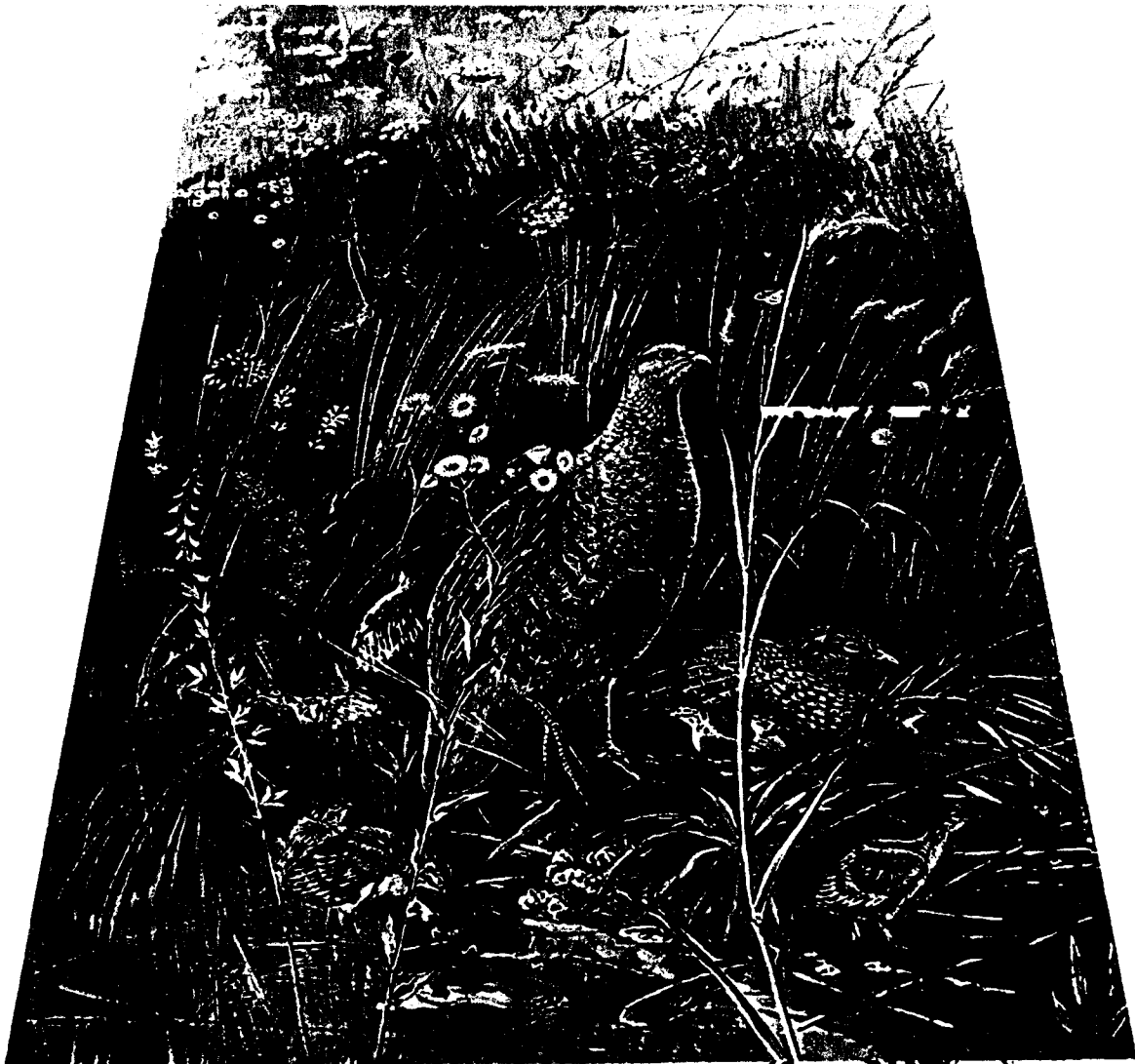
ABSTRACTS

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MANAGING PARTRIDGES

AND OTHER GAME

IN THE AGRICULTURAL LANDSCAPE



CHARACTERIZATION, CONSERVATION AND STRENGTHENING OF LOCAL STRAINS OF THE PHEASANT (PHASIANUS COLCHICUS)

Cappuccio Irene¹, Paci Gisella², Lisi Erica², Profumo Alberto², Mani Paolo³, Valentini Alessio¹, Bagliacca Marco²

1Dip. Zootechnia, Università della Toscana;

2Dip Produzioni Animali Università di Pisa;

3Dip. Patologia Animale Università di Pisa.

Captivity rearing of wild pheasant is changing from an experimental to a commercial technology. Good results are observed after pheasant release of the offspring obtained from captured animals, therefore we wanted to test the genetic and productive characteristics of wild pheasants living in different protected areas (ZRC) of Central Italy.

In order to estimate the level of genetic variability present in the natural populations of *Phasianus colchicus*, 31 samples of wild *Phasianus colchicus* sampled in 6 different locations of Tuscany in 2001, 55 samples of wild *Phasianus colchicus* sampled in 11 different locations of Tuscany in 2002 and 5 samples of reared *Alectoris rufa* were genotyped with 3 microsatellite loci GUA23, GUA59 and GUA86), using pairs of primers developed for Japanese quail (*Coturnix coturnix japonica*) that were able to amplify in *Phasianus colchicus* and resulted polymorphic.

In the meantime a sample of wild pheasant captured in different protected areas of the province of Florence were transferred in a breeding farm and the productive performance were recorded.

The molecular data obtained were used to calculate the genetic differentiation within and between different pheasant populations (AMOVA, F-statistic) and a PCA was used to visualize the data. The observed homozygosity ranged between 0.3333+/-0.1217 and 1. A 89% of molecular variance resulted located within populations. The mean Fis (inbreeding) resulted 0.234 while the mean Fst (differentiation between population) resulted 0.084.

The productive performances of the captured pheasants confirmed the lower performance which can be obtained by just captured wild pheasants in respect to the offspring of the captured pheasants and the reared populations.

Key words: pheasant, genetic structure, production