

## VALIDATION OF PREVENTING DAMAGE SYSTEMS PRODUCED BY PREDATORS ON LIVESTOCK

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In the last ten years, in a lot of areas of Italy, the events of predations on livestock caused by wolves (*Canis lupus*) and wandering dogs have taken such a gravity to put in discussion both the economic life of many farms and the conservation of wolf as protected species; this situation has determined conflicts between social and political components.

The distribution of the wolf in hill and valley areas seems to be not yet finished, so it's necessary to reduce conflicts by the adoption of suitable policies of indemnity (refund) and the realization of measures of prevention that should be compatible with the management practices of breedings.

In the Province of Florence many structures of prevention have been carried out by the collaboration of the Provincial Administration, the Comunità Montana of Mugello and the Breeders' Regional Association.

Systems of prevention, defined with breeders, have been regarded the construction of electric or mixed fences in grazing areas, the use of acoustic alarms and the adoption of guard dogs selected by aptitude.

Through the collaboration between DEISTAF and CSDL, the structures of prevention were placed under monitoring in order to analyze their efficacy. This work presents the results of the analysis of data concerning the electric fences and acoustic alarms.

The study of electric fences applies to n°13 systems, built between 2005 and 2009, which were analyzed for rates of predation (number of prey per year) before and after the construction of the fences and for events of failure of the structures.

The reduction of damage was approximately 94%, and the few cases of predation have occurred due to wrong installation of the system, confirming the importance of a careful and competent designing.

Regarding the use of acoustic alarms, the research is still in progress in the territory of Empolese Valdelsa and Valdarno; the first data analyzed have been confirmed the trend of reduction of events of predation, verifying the efficacy of acoustic deterrents tested.