

# ECOLOGY AND DISTRIBUTION OF RARE MAMMAL SPECIES IN THE SOUTH REGIONS OF UKRAINE (ON THE EXAMPLE OF THE WOLF)

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The objective of the article is to analyse the biotope allocation and specifics of the wolf reproduction in the south regions of Ukraine.

Present populations of the wolf in the steppe zone of Ukraine started their formation in the 1970s. At first, it was caused by reduction of hunting press, and later by appearance of a high number of fields overgrown with weed. Penetration of the wolf into the south of the country went from different directions. In the west groups of great importance were the wolves, survived on the territory of Moldova Republic and in the north of Odesa region; in the north it was at the expense of the population inhabiting the forest zone; in the east there were centres of the wolf habitations, located in forests of the Syverskyi Donets River and in borderline districts of Russia. By 2000 the wolf had inhabited all the administrative regions of the steppe Ukraine. In 1984 the appearance of this animal was recorded on Kerch Peninsula in the Crimea, although its basic expansion to this area began in the first years of the 21<sup>st</sup> century (Fig. 1).

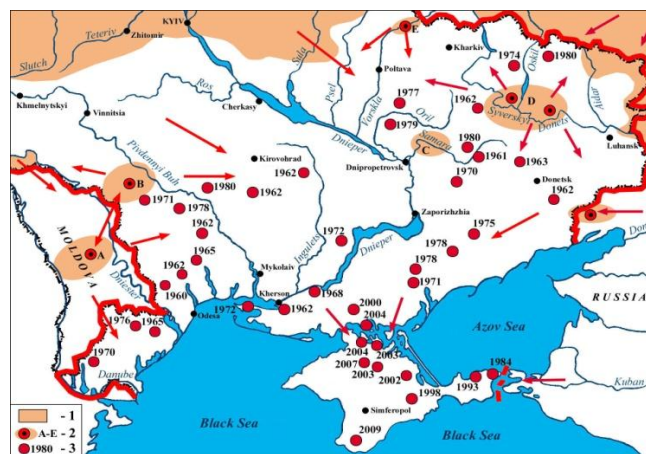


Figure 1. Dynamics of the wolf range in the steppe zone of Ukraine: 1 – sites of the species distribution in the early 1970s, 2 – sites of indigenous distribution of the wolf; 3 – records of animals in 1962 – 2009

The most suitable biotopes for this species in the studied region are sunflower plantations, tall weeds and the gullies overgrown with trees and shrubs, although quite often these animals can be seen in the fields deprived of vegetation (Fig. 2).

In the steppe zone of Ukraine to make a dwelling for their litter wolves predominantly use holes (51.62%), then open dens (25.81%) and specially dug burrows (16.13 %). Most often in flat areas of the steppe zone wolves make dens for cubs in forest belts and blackthorn bushes, whereas in broken terrain they made them in gullies. The average size of the wolf litter in the steppe zone of Ukraine is  $5.5 \pm 0.13$ , the smallest – 2, the largest – 12 cubs. Regional differences of this index are insignificant. The smallest number of cubs in 1 den was revealed in Odesa region ( $5.0 \pm 0.16$ ), the highest – in Lugansk region ( $6.5 \pm 0.37$ ).

The species expansion and increase in the number of local populations was caused by reduced hunting pressure as well as appearance of a high number of fields covered with ruderal vegetation. Nowadays the wolf inhabits territories of all the administrative regions of the steppe zone and actively occupies the Crimean Peninsula where it was extinct since 1928. Another dispersion of the wolf into the steppe zone of Ukraine started in the 1970s and reached its peak in the beginning of the 21<sup>st</sup> century.

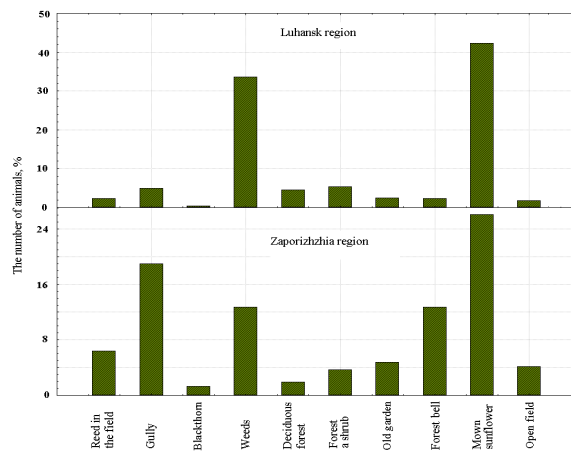


Figure 2. Autumn-winter distribution of the wolf on biotopes in the north (Luhansk region;  $n = 478$ ) and in the south (Zaporizhzhia region;  $n = 163$ ) of the steppe zone

The conclusion can be made that in transformed steppe ecosystems the wolf populations requires management of their number and spatial distribution. It will allow limiting further growth of their quantity as well as save some centres of its distribution.