



SIGNIFICANT GROWTH IN NUMBER OF NESTING PAIRS OF THE GREY HERON (*ARDEA CINEREA*) IN THE RIVER KRAPINA VALLEY (NW CROATIA)

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Population growth of the grey heron in the River Krapina valley from 1992 until 2002 was followed. This area is a part of the village Mokrice (46°00'N, 15°55'E; Hrvatsko Zagorje region). While only 1 pair of grey herons nested in 1992, the number of nestings pairs gradually rose to 54 in 2002 (Pearson's correlation coefficient: 0.98; $p < 0.001$; $n = 11$).

Keywords: grey heron, nesting pairs, River Krapina valley, NW Croatia

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U razdoblju od 1992. do 2002. godine praćen je rast populacije sive čaplje u dolini rijeke Krapine. Lokalitet se nalazi na području sela Mokrice (46°00'N, 15°55'E) u središnjem dijelu Hrvatskog zagorja. Prvi (i tada jedini) par sivih čaplji zabilježen je na gniježđenju prvi put 1992. godine. Postupno, do 2002. godine, broj se gnijezdećih parova značajno povećao na 54 (Pearsonov koeficijent korelacije: 0.98; $p < 0.001$; $n = 11$).

Ključne riječi: siva čaplja, gnijezdeći parovi, dolina rijeke Krapine, sjeverozapadna Hrvatska

The grey heron is the most numerous species of herons that nests in colonies in Croatia (KRALJ, 1997). According to LUKAČ (1998), the grey heron nests in the Po-dravina, Baranja, Posavina, Pokuplje and Slavonija regions. Until 1992, these birds did not nest in the Hrvatsko Zagorje region (DOLENEC, 1997).

The bigger part of the grey heron population migrates, and only a smaller part remains in the River Krapina valley in the wintering period (DOLENEC, unpubl. data). From 1992 until 2002 number of pairs rose significantly ($r = 0.98$; $p < 0.001$;

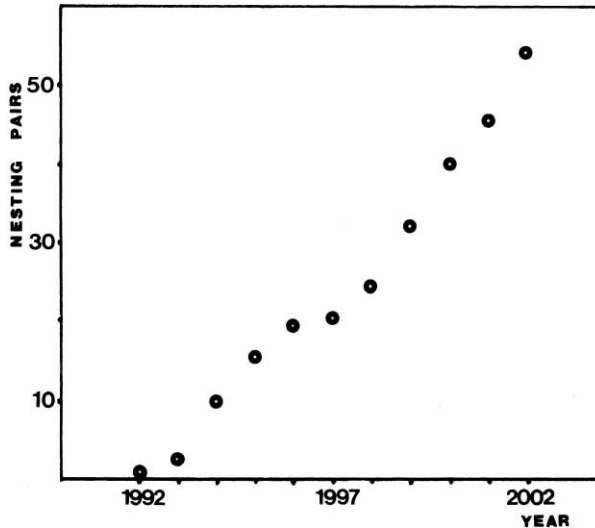


Fig. 1. Significant growth of nesting pairs of the grey heron in 1992–2002 ($r = 0.98$; $p < 0.001$; $n = 11$)

$n = 11$; Fig. 1). In 2002 the colony of nesting birds consisted of 54 pairs. All nests in the Mokrice area were in deciduous trees on the highest branches, 18 to 35 m above the ground. Most of the nests were situated on the Common Oak (*Quercus robur*), some were on the Common Maple (*Acer campestre*) and Ash (*Fraxinus angustifolia*). There were one to max. six nests on one tree. Until 1999, all nests were situated in one grove (size of about 5000 m²), and since the year 2000 colonies have spread onto the neighboring grove (also of about 5000 m²). There is a 100 m distance between the groves and they are separated by a meadow. Both groves are about 150 m away from the River Krapina. In the newly occupied grove in the year 2000 10 active nests were observed. There are small ponds within the groves (size of about 200 m²) of less than 40 cm depth. *Ardea cinerea* species predominantly feeds on fish, amphibians, reptiles, small mammals and insects (GLUTZ VON BLOTZHEIM, 1962).

This study presents only preliminary data. Further studies will show the extent to which food and other ecological factors influence the significant increase in the population size of grey heron in the area of Mokrice village.

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REFERENCES

- DOLENEC, Z., 1997: Siva čaplja (*Ardea cinerea*) nova gnjezdarica Hrvatskog zagorja. *Larus* **46**, 128.
 GLUTZ VON BLOTZHEIM, N., 1962: Die Brutvogel der Schweiz. Verlag Argauer Tagblatt AG, Arau.
 KRALJ, J., 1997: Ornitofauna Hrvatske tijekom posljednjih dvjesto godina. *Larus* **46**, 1-112.
 LUKAČ, G., 1998: List of Croatian Birds. *Natura Croatica* **7**, Suppl. 3, 1-160.

SAŽETAK

Značajan porast brojnosti parova na gniježđenju populacije sive čaplje (*Ardea cinerea*) u dolini rijeke Krapine (sjeverozapadna Hrvatska)

Z. Dolenc

Tijekom jedanaestogodišnjeg razdoblja (od 1992. do 2002. godine) zabilježen je statistički značajan, postupni porast broja parova na gniježđenju u nizini rijeke Krapine. Daljnjim israživanjima utvrdit će se u kolikoj mjeri hrana i ostali ekološki čimbenici djeluju na značajan porast populacije na području Mokrica.