Povzetki diplomskih, magistrskih in doktorskih del

Thesis Summaries

Koce, U. (2005): Gnezditvena ekologija malega deževnika *(Charadrius dubius)* v Ljubljanski kotlini. [Nesting ecology of Little Ringed Plover *(Charadrius dubius)* in Ljubljana Basin]. – Graduation Thesis, University of Ljubljana, Biotechnical Faculty, Department of Biology, Ljubljana.

Mentor / Supervisor: doc. dr. Peter Trontelj / Assist. Prof. Peter Trontelj, PhD
UDK 591.5:595.14(497.4 Ljubljanska kotlina)(043.2)
Avtoričin elektronski naslov / Author's e–mail: ukoce@nib.si

Little Ringed Plover *Charadrius dubius* is a wader which in Europe used to inhabit bare and sparsely overgrown gravely and sandy alluvial river banks but in the last few decades it has also inhabited different anthropogenic biotopes like surface excavations and gravelled areas. In the same period most of the natural habitats vanished due to human interference. Today more than half of Europe's population lives in anthropogenic habitats. In Slovenia its natural breeding grounds are on the rivers Drava, Sava and Soča, while most of the anthropogenic breeding grounds are on the plains of NE Slovenia and in Ljubljana Basin.

This work is the result of two years' research of Little Ringed Plover in Ljubljana Basin. Based on the assessment of some habitat parameters I tried to determine the key habitat parameters which determine the breeding of Little Ringed Plover. I also assessed the importance of anthropogenic habitats for this species in Ljubljana Basin and determined the most important breeding sites.

After systematic survey of the area (aerial photographs and field visits of 119 localities) I identified 42 possible breeding sites of Little Ringed Plover. In the research which followed I surveyed all the nesting Little Ringed Plovers and located their nests. On all gravelled areas I recorded chosen habitat parameters: proportions of granulation categories, proportions of different vegetation types, human activity on and near the gravelled areas, dampness of gravelled areas, relief heterogenity of the ground surface, total surface area and distance to the nearest river. I also determined whether the gravelled area was of artificial or natural origin. I recorded the proportions of particular granulation categories and vegetation types also in the immediate vicinity of the nests.

On 42 gravelled areas 32 pairs of Little Ringed Plovers nested, 17 (53%) on natural gravel banks and 15 (47%) on artificial gravelled areas. The highest density of nesting pairs in natural habitats was on the gravel banks of Sava in the section between the triple confluence of Kamniška bistrica, Ljubljanica and Sava, and Laze near Dolsko (11 br.p.). The highest density of nesting pairs in artificial habitats were in the abandoned gravel pit near Tomačevo (3 br.p.) and in industrial zone Rudnik (3 br.p.).

Logistic regression was used to analyse the influence of individual habitat parameters on nesting. Among several parameters there were two with significant positive influence on nesting: dampness of the ground and proportion of the grains sized 12 – 25 cm. Parameters with significant negative influence on nesting were relief heterogenity of the ground surface and wooden vegetation above 25 cm. As regards the locations, Little Ringed Plover's nesting places were preferrably where the largest portion of granulation were grains sized 2 – 12 cm, and most of the area was bare ground.

The importance of artificial habitats in Ljubljana Basin is high, since they support almost half of regional population (15 of 32 nesting pairs; 47%). These habitats are mostly suboptimal and have the role of replacement habitat due to the lack of suitable natural gravel banks.