



Results of the Mid-Winter Waterfowl Counts in January 2005 (IWC) in the proposed Drava-Mura-Danube Biosphere Reserve

Introduction

The objective of the International Waterfowl Census (IWC) is to organise and implement monitoring of all water birds in the world with regular standardized counts. The size of the aquatic birds' populations, their seasonal distribution and population trends enable an objective assessment of the significance of wetlands of international and national concern (e.g. Scott and Rose 1996, Stumberger 1999) and serve as a basis for the Ramsar Convention criteria. Presented herewith are the results of the first large scale waterfowl counts on the Drava river from the Austrian-Slovene border to the Danube (439 km), and on the Danube from the Croatian-Hungarian border to the confluence with the Drava river (47 km) in January 2005.

Methods and weather conditions

The January waterfowl counts were carried out between January 8th and 24th, 2005. The census methods are described in e.g. Stumberger (1997 - 2002). Birds were counted on the river itself and on various water bodies along it, such as channels, ponds, oxbows, gravel pits, and some tributaries. The Drava sections from the Austrian-Slovene border to the Mura outfall were covered by foot along the river, while along its other sections counts were made with the aid of a boat. All aquatic species were counted. Cormorants *Phalacrocorax sp.* were partially counted at their roost sites, the same as gulls (Laridae). As far as the weather conditions during the census and prior to it are concerned, it can be said that the winter was relatively mild and without snow. The water bodies were in absolute majority with no ice.

Results and discussion

The counts were implemented by 67 observers (plus 60 children) from Austria, Slovenia, Hungary and Croatia. On the Drava river, birds were counted along 376 km of its course. Only the section between Belavar and Donji Miholjac was covered merely partially: 63 km of its course remained unsurveyed. The Danube was covered in full. At

the same time, birds were counted on 26 (most) important water bodies along the two rivers and, in Slovenia, on the Dravinja and Pesnica rivers, the two Drava's tributaries.



Fig. 1: Counting waterbirds at Drava near Repas (CRO), 8 Jan 2005 (photo: N. Wolf)

Altogether, 134,372 water birds belonging to 50 different species were counted (Table 1). The most numerous species were the Mallard, Black-headed Gull, Common Coot, Great Cormorant, White-fronted Goose, Tufted Duck, Common Pochard, Greylag Goose, Common teal, Common Goldeneye, Bean Goose, Mute Swan, Yellow-legged Gull and Little Grebe (> 1000 individuals).



Fig. 2: During the January 2005 counts, the geese's roost sites on the Drava river in Slovenia and in the northern part of Croatia were almost empty due to overhunting (photo: B. Stumberger, Lake Ormoz 1996).

Among the rarest water birds were the Red-throated Diver, Black-throated Diver, Whooper Swan, Tundra Swan, Lesser White-fronted Goose, Red-breasted Goose, Wood Duck, (escape), Velvet Scoter, Long-tailed Duck, Spotted Redshank, Woodcock, Herring Gull and Dipper (1-2 individuals).

Considering the January 2005 weather conditions, the numbers of birds counted on the Drava and Danube rivers were probably below average. On the Slovene part of the Drava river, the total numbers of aquatic birds were average in view of the counts implemented in the last few years (Stumberger 1997-2002). Still, the number of birds in the Drava corridor in Croatia itself exceeded the Ramsar Convention's criterion regarding wetlands of international concern (20,000 water birds) by no less than 5.5 times! On the basis of the 90 counted White-tailed Eagles it can be estimated that the population of these birds overwintering in the proposed Drava-Mura-Danube Biosphere Reserve exceeds 100 individuals. One of the count's features were no less than 659 counted Pygmy Cormorants – 1.5% of the species global population (compare BirdLife International 2004)! This species in fact demonstrates the significance of the Drava's swift-running sections during the wintering period also in places where the river is dammed up with hydroelectric power stations: the Pygmy Cormorants fed, almost exclusively, on the »Old Drava« between the reservoirs.



Fig. 3: The January 2005 waterfowl counts on the Drava river were marked by Pygmy Cormorants (photo: www.europho.to).

It is obvious, therefore, that during the overwintering period the proposed Drava-Mura-Danube Biosphere Reserve is an internationally overlooked wetland of superlatives.

References

Rose, P.M. & D.A. Scott (1997): Waterfowl Population Estimates. 2nd edition. Wetlands International Publ. 44, Wagenigen.

STUMBERGER, B. (1997-2002): Results of the Mid-winter Waterfowl Counts in January 1997-2002 in Slovenia. Acrocephalus.

BirdLife International (2004): Threatened Birds of the world 2004. CD-ROM. Cambridge, UK: BirdLife International.

Table 1: Results of the Mid-Winter Waterfowl Counts in January 2005 (IWC) in the proposed Drava-Mura-Danube Biosphere Reserve

species	number
Red-throated Diver <i>G. stellata</i>	1
Black-throated Diver <i>G. arctica</i>	2
Great Crested Grebe <i>P. cristatus</i>	89
Black-necked Grebe <i>P. nigricollis</i>	8
Little Grebe <i>T. ruficollis</i>	1,005
Great Cormorant <i>P. carbo</i>	7,776
Pygmy Cormorant <i>P. pygmaeus</i>	659
Great White Egret <i>E. alba</i>	539
Grey Heron <i>A. cinerea</i>	885
Mute Swan <i>C. olor</i>	1,429
Whooper Swan <i>C. cygnus</i>	1
Tundra Swan <i>C. columbianus</i>	3
Greylage Goose <i>A. anser</i>	3,253
Bean Goose <i>A. fabalis</i>	1,708
White-fronted Goose <i>A. albifrons</i>	6,967
Lesser White-fronted Goose <i>A. erythropus</i>	2
Red-breasted Goose <i>B. ruficollis</i>	1
Mallard <i>A. platyrhynchos</i>	65,229
Gadwall <i>A. strepera</i>	165
Eurasian Wigeon <i>A. penelope</i>	279
Common Teal <i>A. crecca</i>	2,371
Pintail <i>A. acuta</i>	43
Northern Shoveler <i>A. clypeata</i>	20
Ferruginous Duck <i>A. nyroca</i>	5
Common Pochard <i>A. ferina</i>	3,707
Tufted Duck <i>A. fuligula</i>	5,867
Wood Duck <i>A. sponsa</i>	1
Red-crested Pochard <i>N. rufina</i>	3
Velvet Scoter <i>M. fusca</i>	2
Long-tailed Duck <i>C. hyemalis</i>	1
Common Goldeneye <i>B. clangula</i>	2,268
Greater Scaup <i>A. marila</i>	9
Smew <i>M. albellus</i>	174
Red-breasted Merganser <i>M. serrator</i>	3
Goosander <i>M. merganser</i>	192
White-tailed Eagle <i>H. albicilla</i>	90
Marsh Harrier <i>C. aeruginosus</i>	3
Common Coot <i>F. atra</i>	12,741
Moorhen <i>G. chloropus</i>	32
Water Rail <i>R. aquaticus</i>	35
Spotted Redshank <i>T. erythropus</i>	1
Green Sandpiper <i>T. ochropus</i>	28
Woodcock <i>S. rusticola</i>	1
Common Snipe <i>G. gallinago</i>	5
Black-headed Gull <i>L. ridibundus</i>	15,395
Herring Gull <i>L. argentatus</i>	1
Yellow-legged Gull <i>L. cachinnans</i>	1,322
Common Gull <i>L. canus</i>	15
Common Kingfisher <i>A. atthis</i>	34
Dipper <i>C. cinclus</i>	2
TOTAL	134,372