## CONTRIBUTION TO STUDIES ON WHITE-TAILED EAGLE (HALIAEETUS ALBICILLA LIN-NAEUS, 1758) IN WESTERN SERBIA AND THE REPUBLIC OF SRPSKA. S. Skorić<sup>1</sup>, Katarina Stefanović<sup>2</sup>, and S. Marinković<sup>3</sup>. <sup>1</sup>Center for Multidisciplinary Studies, University of Belgrade, 11000 Belgrade, Serbia; <sup>2</sup>Birds of Prey Protection Fund, 11060 Belgrade, Serbia; <sup>3</sup>Siniša Stanković Institute for Biological Research, 11060 Belgrade, Serbia

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The white-tailed eagle, *Haliaeetus albicilla*, is one of the largest birds of prey in Europe. The nesting population of white-tailed eagle in Europe is estimated to number approximately 5000 pairs; approximately 1% of the entire European population nest in Serbia (BirdLife International, 2004). In the Pannonian low-land, this species was common in the  $19^{th}$  century (D o m - b r o v s k i, 1895). Through destruction of habitats, drying of swamps, and cutting down of gallery forests on floodplains, the

population density of white-tailed eagle decreased to only 10 pairs in the 70s of the last century (H a m, 1977). The whitetailed eagle is currently included in the IUCN list as a near threatened (NT) species (IUCN, 2006) susceptible to changes and disturbances in both terrestrial and aquatic habitats. This feature makes the white-tailed eagle an indicator species suitable for detection of disturbances and pollution, especially in aquatic habitats (H a m et al., 1988).

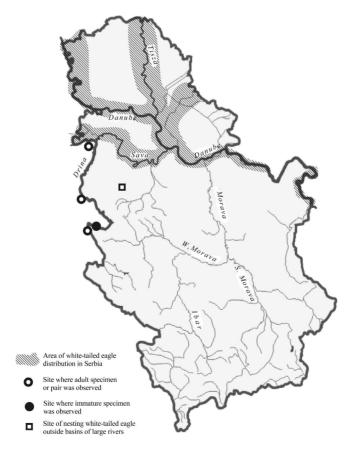


Fig. 1. Map of distribution of white-tailed eagle in Serbia with new observation site.

The habitats in gallery forests on floodplains inhabited by the white-tailed eagle are fragmentary and located near large rivers (the Danube, Sava, Tisza and Tamiš). This species is one of the rare birds of prey showing vitality and ability to adapt to environmental conditions altered by the pressure of human community development.

Because of its fast flow through a canyon, the Drina River in the past was not a suitable habitat for hunting and feeding of the white-tailed eagle. There is a lack of historical data indicating the presence of this species in the canyon of the Drina, although it has been recorded where the river empties into the Sava (H a m and P u z o v i ć, 2000). By the building of several artificial lakes in the second half of the 20<sup>th</sup> century, the water flow was slowed, and new oligotrophic habitats were formed. In recent years, the white-tailed eagle was observed on the Gruža Reservoir near Kragujevac (B a r j a k t a r o v, 2004). In 2003, nesting of white-tailed eagle was noted near the Dokmir fish pond in Western Serbia (R a k o v i ć, 2003).

Observations on the given species were conducted along a transect runing longitudinally around the lakes in combination with census. Zvorničko Lake was monitored by car (40 km/h) along a transect on the bank in places with the best view over a distance of 2 km, whereas Perućac Lake was monitored by boat (12 km/h) (B i b b y et al., 1992).

An adult white-tailed eagle was sighted on Zvorničko Lake where the Drinjača River empties into the Drina from a duck blind on 4 Feb 2000. On Perućac Lake, an adult bird protecting its territory was registered on 14 June 2005 near the mouth of Brusnicki Brook. Along the same transect, one immature (2years-old) individual was observed near Dolovi, about 12 km downstream from the previously seen adult individual (Fig. 1). In 2006, the white-tailed eagle was sighted several times in Tara National Park where Brusnički Brook empties into the Drina River: in late February, in mid-April (Z. J e z d i ć, personal communication) and at the beginning of July (07 July 2006). In all three cases, an adult individual was observed in the same territory (Brusnički Brook). The territory of white-tailed eagle is on the border between Serbia and the Republic of Srpska, which made it impossible to conduct detailed terrain research and establish location of the nest.

The population of white-tailed eagle in Serbia has been monitored by the Center for Multidisciplinary Studies (CMS) and Birds of Prey Protection Fund since the year 2003. During this period, the presence of white-tailed eagle in the Republic of Srpska was recorded during the nesting period at a location near the mouth of the Drina River in the Semberija region. Apart from these observations, the presence of white-tailed eagle in the Republic of Srpska during the nesting period was noted only at the Bradača location near the Sava River (G a š i ć, 2001). New habitats on oligotrophic lakes enabled white-tailed eagle to adapt and live in territories in Serbia not previously inhabited by this species. These results suggest that the given species will expand its distribution to other accumulative lakes rich in fish and waterfowls, i.e. the Zvorničko, Višegradsko, and Uvačko Lakes.

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