

## First breeding of the Imperial Eagle (*Aquila heliaca*) in the “Borská nížina” lowland (SW Slovakia)

### Prvé hniezdenie orla kráľovského (*Aquila heliaca*) na Borskej nížine (JZ Slovensko)

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**Abstract:** In 2007, breeding of the Imperial Eagle in locality “Devínske jazero” lake (near the village of “Vysoká pri Morave”, SW Slovakia) was observed. The pair fledged 2 young. This was the first recorded breeding of this species in the “Záhorie” region. The eagles also bred the following year, 2008. During breeding, a change of male occurred so the nest remained unproductive (one fertile egg was found in the nest). Both cases suggest the current trend of occupying new sites in the Southwestern part of its breeding range.

**Abstrakt:** V roku 2007 bolo zaznamenané zahniezdenie orlov kráľovských na lokalite Devínske jazero (kat. územie obce Vysoká pri Morave, JZ Slovensko). Pár vyviedol 2 mláďatá. Išlo o historicky prvé zistené hniezdenie tohto druhu na Záhori. Orly zahniezdili i v nasledujúcom roku 2008. Počas hniezdenia došlo k výmene samca, hniezdo bolo neproduktívne (na hniezde ostalo 1 fertílne vajce). Oba prípady potvrdzujú súčasný trend obsadzovania nových lokalít týmto druhom v severozápadnej časti jeho hniezdného rozšírenia.

**Key words:** Imperial Eagle, *Aquila heliaca*, breeding, south-west Slovakia

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### Introduction

In Slovakia, the Imperial Eagle (*Aquila heliaca*) is a regularly breeding species. In the last 5 years the number of breeding pairs has remained relatively stable. 40–45 pairs breed yearly in Slovakia (Chavko & Danko 2005, 2008; Chavko et al. 2006, 2007). In Western Slovakia, the breeding population is concentrated to the “Podunajská nížina” lowland and adjacent mountains such as the “Malé Karpaty” Mts, “Považský Inovec” Mts, and “Tríbeč” Mts. Recently, new territories in agricultural landscape have been occupied, but breeding were often unsuccessful due to illegal persecution (Lengyel 2007) or nest robbery (Latková et al. 2006).

Since the 1990s, the Imperial Eagle began to occur regularly in southwest of the “Morava” region. In 1998 the first breeding was recorded and the eagles fledged

2 young (Horák 1998). Already since 2001 two pairs of eagles used to breed there and in 2004 the number increased to 3 pairs. During 1998–2006, 16 breeding attempts were recorded in total, from which 12 were successful and altogether 21 chicks fledged (Horal 2006).

In 1999, in the Austrian part of the “Pomoravie” region (northern part of the Burgenland) the first breeding was reported, whereas in 2003 three complete pairs of eagles were observed. In Austria since 1999 the Imperial Eagles bred successfully four times and they fledged a total of 9 young (Ranner 2005).

In the “Borská nížina” lowland, the breeding of this species has never been recorded, although the Imperial Eagles were observed regularly every year. Mostly young eagles (1–3 years old) were spotted, individuals, pairs or three individuals together (Noga unpubl.). The riparian fo-

rests near the villages “Moravský Svätý Ján”, “Brodské”, and “Kúty” as well as pine forests (“Gbelský bor”, forests of army training territory in the “Záhorie” region) have been marked as potential breeding sites and monitored. However, no breeding attempt was documented.

## Results

### Year 2007

On April 17, 2007, J. Mikuš and A. Kovačský were shooting a documentary film about wetland birds in the area of “Devínske jazero” lake (near the village of “Vysoká pri Morave”). During filming, they spotted an unusually big nest on a solitary willow and also ascertained the presence of an Imperial Eagle pair. The age of the male was estimated to be 3 years according to its coloration. The female was also an adult but without obvious white spots on the back. During the observation the male brought building material to the nest. Around the middle of

May they visited the locality again and the female was incubating on the nest. The male was sitting in the tree on dead branches, not further than 50 meters from the nest itself. Owing to the ongoing film work, the locality was repeatedly visited on July 11, 15, and also 16, 2007 after a big windstorm. The nest, with 2 chicks, remained undamaged. The male brought food from freshly mowed meadows in the immediate vicinity of the breeding site. Since then, the breeding site has remained unchecked.

During winter (December 15, 2007; January 25, 2008; and February 20, 2008), a one year old individual was observed in the Austrian part of the Morava river, around the city of Gansserdorf, only 15 km away “as the crow flies” from “Devínske jazero” lake (Bierbaumer in litt.). It is possible that this eaglet fledged from the nest in “Devínske jazero” lake. The nest, was situated on lateral branches of a solitary willow, however unfortunately it fell down during winter.



J. Chavko

**Fig. 1.** Abandoned egg in the Imperial Eagle's nest in “Devínske jazero” lake, 18 July 2008.  
**Obr. 1.** Zachladnutá násada v hniezde orla kráľovského na Devínskom jazere, 18. júl 2008.

In addition to the above mentioned breeding pair, on June 19, 2007, two Imperial Eagles were observed only 2 km away from this locality. Their coloration suggested that they were not individuals belonging to the local breeding pair.

#### Year 2008

From the end of January, the breeding locality was monitored regularly (Noga, Nemček). On January 26, 2008 the female was observed resting next to the newly built nest. It was an adult bird with not so without obvious spots on its back; therefore we supposed it was the same individual as the one of the previous breeding season. The male of this pair was not an adult bird and based on the coloration of plumage its age was estimated to be 3 years. During occasional observations from a close proximity we spotted a plastic ring with an alphanumeric code on its right leg and aluminum ring on its left one. The orange color of the ring was the same used by ornithologists to mark eagles on Slovak breeding sites during 2005–2007. The alphanumeric code could not be read. Taking into consideration that the male was a maximum of 3 years old, it could not be the individual which bred in “Devínske jazero” lake in 2007.

To avoid any possible disturbance around the breeding site, the Local Environmental Authority established a protected zone with a radius of 300 meters around the nest. The nest was monitored from a distance in intervals of approximately three weeks.

During a strong windstorm in April, almost one third of the nesting tree was snapped off, but the branch with the nest remained undamaged and the female did not leave it. During monitoring on the May 26, 2008 the female was still sitting on the nest; the male was not observed.

During a visit on the 10th July, the nest was abandoned. The adult eagle with marked spots on its back was sitting on a dead branch of a solitary willow 80–100 meters from the nest. Even during a following visit on the July 12, no other eagle was observed, but only a completely colored adult. As no observation of the eagle returning to the nest was recorded during our whole visit, we decided to do a quick inspection of the nesting tree. No evidence was found as to the presence of a chick on the nest (droppings, fluff), neither any fallen chick or any attempts to climb the nesting tree. On 13th July two eagles – an adult which stayed close to the nest and the adult female from the breeding pair were observed. Apparently, in the period between the 1st and the 10th of July, an exchange of the male with another adult sitting on solitary tree close to the nest happened. However the

behavior of the eagles suggested absence of alive young on the nest. During an inspection of the nest on July 18, 2008 (carried out by J. Chavko) one abandoned egg was found (Fig. 1).

#### Conclusion

In 2007 and 2008, in locality “Devínske jazero” lake, a breeding attempt of the Imperial Eagle (*Aquila heliaca*) occurred. The breeding biotope was extensive alluvial meadows of the river “Morava”. In both years, the nests were situated on solitary willow tree, but after a nest fell down in winter 2007/2008 the eagle pair built up a new one on an adjacent branch.

In 2007, an immature pair fledged 2 young on this locality. This was the first recorded breeding of this species in the “Borská nížina” lowland.

In 2008, more attention was dedicated to monitoring of the breeding. The female from the breeding pair was adult; the 3 years old male was substituted by another adult during the breeding period. However, the breeding was unsuccessful and during an inspection on 18th June 2008 one abandoned egg was found in the nest.

The above described breeding attempts of the Imperial Eagle in the “Borská nížina” lowland suggest the current trend of occupying new localities in southwestern part of its breeding range. At present, 1–2 pairs breed in Austria, and 2 pairs in the Southern Morava region. Further, the observation on June 6, 2006 of six Imperial Eagles soaring together above grain fields in the surroundings of the “Devínske jazero” lake implies that this area attracts this species.

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