

Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 (Aves: Accipitridae) Breeds in the Czech Republic Again

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Abstract: The oldest breeding records of Lesser Spotted Eagle *Clanga pomarina* Brehm, 1831 in the Czech Republic date back to the 2nd half of the 19th century. Lesser Spotted Eagle has been breeding regularly in the Šumava Mts. and in the fishpond area of Southern Bohemia. The concrete data concerning the breeding of the species in the 20th century come from the Czech-Moravian Highlands, Hostynské vrchy hills, and probable breeding is assumed in the eastern part of the Krkonoše Mts. and in eastern Moravia. However, no nest has ever been found. In 2012, breeding was confirmed at the edge of Slavkovský les hills. Since then, the breeding in this area has been confirmed on an annual basis. Considering the earlier observations, it is possible to assume that Lesser Spotted Eagle has been breeding there since at least 2007, with maybe even two pairs. Another occupied territory was found in the Český les hills, 20 km southwest of Slavkovský les hills. Observations in 2016 and 2017 indicated breeding. Currently, breeding of one pair of Lesser Spotted Eagle has been confirmed in the western part of Czech Republic and probable breeding of 1-2 pairs has been assumed there.

Key words: Lesser Spotted Eagle, Czech Republic, breeding

Introduction

Lesser Spotted Eagle (LSE) *Clanga pomarina* Brehm, 1831 has never been a numerous breeding bird species in the Czech Republic (CZ). The country is situated at the westernmost edge of the species' continuous breeding range (FERGUSON-LEES & CHRISTIE 2001). Many of the published historical records from various sources cannot be considered fully reliable. Nevertheless, historically, the breeding was confirmed at several localities of both Bohemia (western part of CZ) and Moravia (eastern part). The oldest concrete records come from the 2nd half of the 19th century from South Bohemia (FRIČ 1872). In South Bohemia (especially the fishpond area with large forests around the towns of Třeboň (Wittingau) and České Budějovice (Budweis), as well as Šumava (Böhmerwald) Mts.), the breeding was regular in the past. It is difficult to estimate the

population size in the late 19th and early 20th century in South Bohemia – probably consisting only of isolated pairs. The raptors were extensively persecuted during this period, which prevented the population increase and range expansion. Tens of specimens of LSE in the museums all over the country witness the large-scale raptors persecution in the past.

Since the 1950s, LSE has repeatedly bred in the Šumava Mts. There are published records of the breeding in the Blanský Les Mts., near the town of Prachatice, in the spring area of the Vltava (Moldau) River near Chvalšiny, and at Stožec area (SVATOŠ 1971, ANDERLE 1985). In 1985-1989, the breeding was repeatedly confirmed within Boletice military training area, situated within the Šumava region. Since 1990s, the breeding of LSE has not been confirmed in South Bohemia. Since 2003, repeated

observations of single birds and even an established pair have been reported from Boletice military training area. Single breeding-season observations have been noted elsewhere in South Bohemia but no breeding was confirmed. Most probably, these records are related to wandering, non-breeding, immature individuals (KLOUBEC et al. 2015).

During the 20th century, the breeding of LSE was confirmed also in other places in CZ, e.g. two times in the Bohemian-Moravian Highlands (HANZÁK 1961) or in Hostynské vrchy hills (SVOBODA 1968, MRLÍK 2003). Possible or probable breeding of LSE was recorded in several other areas of CZ. One of them is the eastern part of the Krkonoše (Riesengebirge) Mts. Here, many breeding-season observations were reported, especially from the period 1986–1995, but breeding was never confirmed (FLOUSEK & GRAMSZ 1999). Also, many observations suggesting breeding come from northern and eastern Moravia (cf. HUDEC & ŠŤASTNÝ 2005) but breeding was never confirmed there either. In particular, many observations from the 1980s and the 1990s from Bílé Karpaty Hills bordering CZ and Slovakia suggest possible or probable breeding (HORAL et al. 2003); this area is adjacent to the continuous breeding range of LSE in Slovakia.

Nation-wide breeding birds' mapping took place in CZ in 1973–1977, 1985–1989 and 2001–2003 (ŠŤASTNÝ et al. 1987, ŠŤASTNÝ et al. 1997, ŠŤASTNÝ et al. 2006). During the first period, no evidence of LSE breeding was recorded anywhere in CZ except in the Šumava Mts., despite the numerous observations of individuals and (or) pairs in other regions. The population size in CZ in the 20th century never exceeded 3–5 breeding pairs (cf. MRLÍK 1998). The very interesting record of possible breeding comes from the second period (1985–1989) from the area of Doupovské Hory Hills in western Bohemia, the area neighbouring the present LSE breeding ground.

Materials and Methods

For the purpose of this paper, published literature sources were used. We compiled data from the on-line avifaunistic database run by the Czech Society for Ornithology (<http://birds.cz/avif>), the archive of the Working Group for Birds of Prey and Owls (part of the Czech Society for Ornithology), as well as other unpublished data of authors and colleagues involved in LSE surveys. Since 2007, the current breeding area in western Bohemia was visited regularly (on a weekly basis on average) during the breeding period. The historical breeding sites were visited sporadically and all observations indicating possible breeding by repeated sightings during the

breeding season were crosschecked.

Results and Discussion

In 2012, two papers confirming LSE breeding in western Bohemia, edge of Slavkovsky les hills (Kaiserwald) Hills, were published (BUŠEK 2012a, b). The first observation was recorded on 7 May 1987, near the village of Bražec (50.17N, 13.05E), assessed by the author as possible migration. Nevertheless, an early May record might be related to breeding, too. Unfortunately, no further observations from this season exist. In 2007, two birds were observed on 27th August, perching in a pasture at the present breeding ground near the village of Mnichov (50.04N, 12.79E). During the short visits in 2008, LSEs were not observed; in 2009, a single bird was observed several times with no signs of breeding. In 2010, attention was paid to this locality. Two LSEs (probably pair) were repeatedly observed from 22nd April until August but a nest was not found. In 2011, the locality was occupied by a displaying pair but a nest was not found either. In 2012, the nest with one big chick (which later successfully fledged) was found on 12th July near the village of Mnichov at the edge of Slavkovsky les hills Hills (BUŠEK 2012a, b). In 2013, a LSE pair bred at the same locality; one grown chick was predated on the nest before fledging, supposedly by an Eagle Owl (*Bubo bubo* Linnaeus, 1758) or a Northern Goshawk (*Accipiter gentilis* Linnaeus, 1758) (the remnants were found under the nest). In 2014, the LSE pair built a nest ca. 5 km from the former one, near the village of Tisová (50.04N, 12.85E). One young was reared but was later found dead not far from the nest, most probably hit by a car on the road. The next year, the pair returned back to the previous breeding place, and in the period 2015–2017, one young was reared successfully every year.

During the period 2011–2013, up to 4 LSEs were observed in Slavkovsky les hills Hills (V. Teplý, personal communication). Therefore, breeding of 2 pairs could be considered possible.

The breeding area is extensively used farmland comprising hay meadows (prevailing) and pastures (total ca. 40%), a smaller area of ploughed fields (ca. 30%, mostly cereals) and ca. 30% of forest formed mainly by conifers (Norway Spruce *Picea abies* H. Karst. and Scotch Pine *Pinus sylvestris* L.). The altitude ranges between 600 and 700 m a.s.l. (the afforested peaks reach up to 900 m a.s.l.).

In 2016, on 5th June, near the Bavarian town of Mähring (49.91N, 12.53E), a German ornithologist C. Rohde (personal communication) spotted a

LSE catching a prey (most probably common vole *Microtus arvalis* Pallas, 1778) and, with a rodent in its beak, crossing the Czech border and flying into CZ territory. In 2017, the area was monitored intensively from May to July. On three occasions, LSE individuals or a pair were observed soaring over pastures near the village of Tři Sekery (49.94N, 12.62E, O. Šreibr, personal communication). The territory was occupied again but the nest was not found. The birds were aged as adults and the breeding was considered to be unsuccessful. The locality is situated ca. 20 km SW of the regular breeding ground near the village of Mnichov. As the fidelity is well known in LSEs (see e.g. MEYBURG et al. 2004), we can presume that the breeding place in Slavkovský les hills had been occupied much earlier than the first breeding was confirmed. One ringing recovery may indicate the origin of the birds from the small breeding population in western Bohemia: the bird ringed as a chick in Hakel area (Harzvorland, Sachsen-Anhalt, Germany) on 30 July 1995 was found dead in the (future) LSE breeding place in western Bohemia near the village of Mnichov (50.04N, 12.78 E) on 23 August 2010 (229 km, 5503 days later). At the time of ringing, the local LSE breeding population in Hakel (Harzvorland) reached 2-4 pairs (STUBBE et al. 2000).

The analysis of the available recent observations enabled us to estimate the current LSE breeding population size in western Bohemia (i.e. also in the whole CZ) at 1-3 pairs. The data from Harz (STUBBE et al. 2000) witness that even very small and isolated populations might prosper, although situated apart from the species traditional migration routes. In Harz, in the late 1970s, the local population had been after ca. 100 years; the last pair bred there in 2011 (BOSCH & MEYBURG 2012). Far apart from the continuous species range, one LSE pair has bred in eastern France since 2004 (MICHELAT 2005) until recently (BOSCH & MEYBURG 2012). Similarly, the Šumava Mts. population has thrived for at least 40 years (since 1950s until the 1990s). Unfortunately, except for the 1970s (ANDERLE 1985), the population was not studied properly and there is no reliable data.

Apart from the data from western Bohemia, no observations indicate possible or probable breeding elsewhere in CZ during the last atlas mapping (2014-2017). On the contrary, an obvious increase was recorded in a number of observations of non-breeding individuals during these years (mainly May to August). The database of the Czech Society for Ornithology includes the following observations recorded in that particular period: 2 individuals in

March, 17 individuals in April (i.e. during the spring migration), 23 individuals in May, 29 individuals in June, 23 individuals in July, 73 individuals in August and 22 individuals in September (i.e. during the autumn migration). The observations recorded in the vicinity of the breeding site in western Bohemia and the repeated observations made by different ornithologists in localities which the non-breeding individuals occupied for a longer period are not included in this analysis. Due to the fact that the determination of different age-groups is so difficult, it is impossible to assess the proportion of immature and adult floaters. It would be easy to overestimate the abundance of the population within a specified area if the occurrences of the floaters were assessed non-critically. We presume that the LSE will be a member of the Czech breeding avifauna also in the future.

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