

Discerning the presence of Thrush Nightingale (*Luscinia luscinia*) among Common Nightingale (*Luscinia megarhynchos*)

Rozlíšenie prítomnosti slávik veľkého (Luscinia luscinia) medzi slávikmi obyčajnými (Luscinia megarhynchos)

Michael BLAIR

7 Bryony Court, Holt, Norfolk, NR25 6AF, United Kingdom; blair@dialstart.net

In many cases, Thrush Nightingale *Luscinia luscinia* and Common Nightingale *Luscinia megarhynchos* sing from concealment, but may sing from exposed branches during the day (Snow & Perrins 1998). The former has a breeding distribution (Bogucki & Sorjonen 1996, Mošanský & Danko 2002) largely north and east of the latter (Grüll & Fracasso 1996), but has experienced a westward spread in central and eastern Europe since the 1970s (Bogucki & Sorjonen 1996). There has been no corresponding retreat in the area of overlap of the breeding distribution of Common Nightingale (Grüll & Fracasso 1996), which means in a widening zone of sympatry, bird survey workers and birdwatchers can expect to encounter both species in areas where once only Common Nightingale could be found. Many popular bird books still show only an outdated distribution of Thrush Nightingale in this region of Europe (Mullarney et al. 2001). In places, the breeding range expansion of Thrush Nightingale may be linked to a reduction in livestock farming, allowing encroachment of dense bushes that comprise primary habitat (Koskimies 1989).

Clearly, the best way of confirming the identity of Thrush Nightingale is in the hand of a ringer, but those individuals encountered in Slovakia had a greyish back and inner wings, muted rufous tinge to the dark primaries and a rufous rump. They were altogether greyer and lacking the dull rufous ground colour usually seen. Perhaps the strong sunlight of the 2007 spring had accelerated plumage fading. The nominate Common Nightingales had a rufous

back and brighter rufous in the primaries and the rump tended to have a longer area of rufous. Chest markings on individuals were inconclusive. All birds seen resembled more closely those illustrated in Mullarney et al. (2001) than those in Snow & Perrins (1998), yet the Thrush Nightingale illustrated in Mullarney et al. (2001) is in autumn plumage! Some individual plumage variation was noticeable in Common Nightingale. Although hybridisation is known, it may be limited to male Thrush Nightingales at the limit of range expansion mating with female Common Nightingales. The male offspring are sterile and the female fertile (Bogucki & Sorjonen 1996), which may help restrict gene-flow and minimise numbers of hybrids. It would scarcely be a surprise if Euring records revealed a surprising number of 'wanderers' to western Europe, but even in the area of expansion, ringing results are constrained by the ringing effort that can be deployed and by ringing priorities. However, despite the difficulties, it is often possible to confirm the presence of Thrush Nightingale among Common Nightingale populations, through careful listening to song and by identifying the singing bird, particularly when singing is at its most intense during the early part of the breeding season.

The advent of bird species' songs and calls on memory cards fitted to pocket personal computers, in this case a Hewlett-Packard iPAQ Personal Digital Assistant (PDA) containing the Collins e-Guide (Mullarney et al. 2006), allows the bird survey worker or birdwatcher to attune to the aural memory, or to refresh it

in the field while listening to the bird singing. People with both a good aural memory and a good sense of musical pitch are at an advantage here. Unfortunately, many keen ornithologists or birdwatchers lack to a varying degree one or other of these abilities, the latter condition known popularly as having a 'tin ear'. From mid-May to mid-June 2007, while carrying out bird survey work for the Institute of Forest Ecology SAS, Zvolen, Slovakia, we (a group of nine people from the Royal Air Force Ornithological Society) had the opportunity to note the behaviour and interactions of many bird species. The first part of the survey was in the Ipeľ valley, working eastwards from Šahy (close to the Hungarian border, in southern Central Slovakia). Drought had hit the area in winter and spring – the rivers and streams were low, the spring cereals had died in many places, the grasslands were parched (most lacked Yellow Wagtails *Motacilla flava* entirely) and the day temperatures reached 34 °C. The corollary was that many species, including Common Nightingale, appeared to have concentrated along the banks of the River Ipeľ in the trees, bushes and undergrowth.

In previous years, I have visited locations where there were good populations of Common Nightingale and where Thrush Nightingale was also present. Amongst the lakes and waterways just southwest of Berlin, I was able to compare the songs of the two species, and also to see the individual birds as they sang. In this location, the species' songs clearly differed, the Common Nightingale's having much more variation and usually beginning with much more 'introductory' material. It was useful to be able to see the plumage colour differences in good light, the Thrush Nightingale being very much duller indeed on its upperparts, except for the rufous rump, which contrasted strongly. I understand that the species had first been noted there in the early 1990s (Klaus Witt, pers. comm.).

On several visits to the Hortobágy Nemzeti Park in eastern Hungary from 1995 onwards, I found Thrush Nightingale in small numbers amid a dense population of Common Nightingale in a tract of immature wet woodland

bordering the road that runs across the north of the park. The sound of so many Common Nightingales quite obscured any noise other common songbirds might be making, but Thrush Nightingale could be distinguished, and very occasionally I was able to see an individual clearly. However, there was a lesson to be learnt here – the songs of Common Nightingales sometimes varied between individuals, not only in content, but also in 'sweetness' and 'harshness' – in other words, different individuals had different 'voices'. The problem was that a Common Nightingale singing in a 'voice' that lacked ornamentation could not always be distinguished for certain each time it sang from a nearby Thrush Nightingale. It may be that when singing Common Nightingales are at a high density, variation in individual songs may be one way for a female to pick out one male from another, but we must bear in mind that what a human ear hears in terms of note-repetition rate and harmonic variation is not what a bird hears. I have also heard considerable 'voice' variation amongst individual Common Nightingales in central Turkey in suitable habitat created by local irrigation schemes in narrow valleys.

In response to my questions, researchers at Biologische Station Illmitz in eastern Austria told me in 2006 of occasional Thrush Nightingales trapped there in good breeding condition. I had asked the question because I believed I had heard one singing amongst the trees there, although I did not see it. Lastly, when in Cyprus in March 2002, I heard a call from thick undergrowth below the Asprokremnos Dam. To me, it sounded different from the calls of the migrant Common Nightingales. Eventually the bird, overall very dull rufous in appearance, flew across the valley. Shortly afterwards, a short burst of song convinced other birdwatchers, and eventually it was seen clearly, a Thrush Nightingale.

In Slovakia, there is a known regular breeding area in the Eastern Slovakia (Mošanský & Danko 2002), and irregular breeding attempts were recorded also from western Slovakia (Kaňuščák & Kočí 2002). However, breeding data are missing from central part of the coun-

try. During our survey work in the Ipeľ valley in 2007, I therefore listened attentively to the nightingale 'voices'. Once again, I could hear a wide variation in the Common Nightingale 'voice', although in the majority of cases, the song strongly resembled that on our PDAs. Nevertheless, on a number of occasions, perhaps a dozen, there seemed to be something very distinct indeed, and I investigated as best I could, thick undergrowth and foliage and also the international border (with Hungary) permitting. On two occasions, the only bird seen was a Common Nightingale, but unfortunately, not during song. On perhaps four occasions, no bird was seen, or was seen insufficiently well for any decision. On six occasions Thrush Nightingale was seen, although on three of those, a Common Nightingale was within 10 metres. On three of those six occasions, the Thrush Nightingale sang or called, the best being east of the hamlet of Peťov (May 18, 2007, N 48°07', E 18°30'), beside the embankment to the former road bridge into Hungary, where two Thrush Nightingales were competing from the tops of adjacent bushes, below us. The bushes, two of many, were about 8 metres apart in a meadow of lush, tall grass. On returning to that meadow some ten days later, the grass had been cut, and the Thrush Nightingales were silent or absent. However, about 300 metres downstream, I heard what could have been a Thrush Nightingale, but I did not see the bird despite a patient wait.

To put the above in context, during my time on the survey work along the Ipeľ River and in the lowlands some 50 km further east, I heard many nightingale calls, songs, or fragments of song that might have been Thrush Nightingale, but actually were (where the individual was seen) or probably were simply Common Nightingale uttering 'plainsong'. However, I think a broader context also applies. After many years of bird survey work in UK or elsewhere, I have noted the tendency for bird species that claim territory early in the breeding season to change their song, even slightly, once another species takes up residence. Near where I live, Dunnock *Prunella modularis* is an early breeder, and when it sings, there are few harsh

notes, but when Common Whitethroat *Sylvia communis* arrives, the latter's scratchy song, I would suggest, is the origin of harsher notes in the Dunnock's song. Mimicry is an innate ability of many bird species, but species-by-species extent of mimicry varies, Marsh Warbler *Acrocephalus palustris* being the 'expert', with over 200 species recorded (Snow & Perrins 1998). To my ears, many species incorporate mimicry to a slight degree, and some mimicry by Thrush Nightingale has been reported, for example from Armenia (del Hoyo et al. 2005), but I am not aware of any cogent overview in the literature of the extent to which Thrush Nightingale and Common Nightingale do so, although it is known that they will respond to each other on occasion (Snow & Perrins 1998) – I have noted this inter-species behaviour previously, but could confirm it only twice in Slovakia.

Súhrn

Počas monitoringu vtáctva v údolí rieky Ipeľ v máji 2007, sa registrovala široká variabilita v „hlase“ slávikov. Vo väčšine prípadov sa spev veľmi podobal na playbackové záznamy sláviky obyčajnejho (*Luscinia megarhynchos*). Ale asi v 10 prípadoch boli hlasy veľmi odlišné. V dvoch prípadoch jediným spozorovaným druhom bol *L. megarhynchos*. Asi v štyroch prípadoch druh nebol určiteľný. V šiestich prípadoch to bol druh slávik veľký (*Luscinia luscinia*), ale v troch z nich sa v okruhu 10 m nachádzal aj druh *L. megarhynchos*. V troch z týchto prípadov *L. luscinia* spieval alebo volal najjednoduchšie východne od dedinky Peťov (18. 5. 2007, 48°07' s. š., 18°30' v. d.), kde na vrcholoch susediacich kríkov (8 m od seba) sa pretekali v speve dva sláviky veľké. Po návrate na to isté miesto o niekoľko dní boli sláviky veľké ticho alebo chýbali. Autor si po rokoch pozorovania vtákov vo Veľkej Británii či inde všimol, že jednotlivé vtáčie druhy majú tendenciu na začiatku hniezdnej sezóny zmeniť, hoci nepatrne, svoj spev len čo sa v teritóriu objaví iný druh. Napr. v Škótsku je včasným hniezdičom *Prunella modularis* a jej spev spo-

čiatku obsahuje málo drsných tónov, ale keď príde *Sylvia communis* so svojim drapľavým spevom, spôsobuje ďalšie drsné tóny v speve *P. modularis*. Určité napodobňovanie slávika veľkého je známe napr. z Arménska, podobne aj, že občas si odpovedajú slávik veľký a slávik obyčajný, čo sa podarilo potvrdiť na juhu stredného Slovenska.

References

- BOGUCKI Z. & SORJONEN J. 1996: Thrush Nightingale. — Pp.: 514–515. In: HAGEMELER W. J. M. & BLAIR M. J. (eds.): The EBCC Atlas of European Breeding Birds. — T & AD Poyser, London.
- GRÜLL A. & FRACASSO G. 1996: Nightingale. — Pp.: 516–517. In: HAGEMELER W. J. M. & BLAIR M. J. (eds.): The EBCC Atlas of European Breeding Birds. — T & AD Poyser, London.
- DEL HOYO J., ELLIOT A. & CHRISTIE D. A. 2005: Handbook of Birds of the World. Vol 10. — Lynx Edicions, Barcelona.
- KAŇUŠČÁK P. & KOČI J. 2002: Hniezdenie slávika tmavého (*Luscinia luscinia*) na západnom Slovensku. — Tichodroma 15: 83–91.
- KOSKIMIES P. 1989: Distribution and numbers of Finnish breeding birds. Appendix to Suomen Lintuatlas. — SLY, Lintutieto Oy, Helsinki.
- MOŠANSKÝ L. & DANKO Š. 2002: Slávik veľký (*Luscinia luscinia*) — Pp.: 461–463. In: DANKO Š., DAROLOVÁ A. & KRISTÍN A. (eds.): Rozšírenie vtákov na Slovensku. VEDA, Bratislava.
- MULLARNEY K., SVENSSON L., ZETTERSTRÖM D. & GRANT P. J. 2001: The Collins bird guide. — Collins, London.
- MULLARNEY K., SVENSSON L., ZETTERSTRÖM D. & GRANT P. J. 2006: The Collins bird e-Guide. — PDA Solutions, Johannesburg.
- SNOW D. W. & PERRINS C. M. 1998: The Birds of the Western Palearctic, Concise Edition. — Oxford University Press, Oxford.

Received: August 7, 2007

Accepted: November 2, 2008