

New Records of the Rose-ringed Parakeet *Psittacula krameri* (Scopoli, 1769) (Aves: Psittacidae) in Bulgaria

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Abstract: Observations of the Rose-ringed Parakeet (*Psittacula krameri*) in Bulgaria are presented with locations and additional details. The data about the species occurrence were collected from 2003 to 2017, mainly in or close to areas, where the species was observed before, and new locations were also added. The present research aims to contribute to the knowledge about the distribution of this potentially invasive alien species in Bulgaria.

Key words: Alien birds, introductions, occurrence, Bulgaria

Introduction

The Rose-ringed Parakeet (*Psittacula krameri*) is a widespread species, native to Asia and Africa, and its distribution is expanding worldwide, including Europe (observed in 12 countries from Belgium and the UK to Greece and Slovenia), due to a variety of introduction activities (DEL HOYO et al. 1997, NANKINOV 2006). The species found favourable conditions in many new countries and is already a part of the breeding bird fauna there (BIRDLIFE INTERNATIONAL 2016). After the first confirmed observation of this bird for Bulgaria in 1996 (NANKINOV & POPOV 1997), new findings in different sites followed in the next two decades, although no successful breeding has been confirmed up to date (NANKINOV 2006, IANKOV 2007). This work presents unpublished observations of the Rose-ringed Parakeet in Bulgaria and will contribute to the improvement of the knowledge about the distribution of this potentially invasive alien species in the country.

Materials and Methods

The materials presented in this study were collected in the whole country during field trips in the period 2003-2017. In most cases, no optics were used, but the proximity to the birds was acceptable for correct visual and often sound identification. We included here only the observations of undoubtedly identified individuals. One of the birds was also documented photographically.

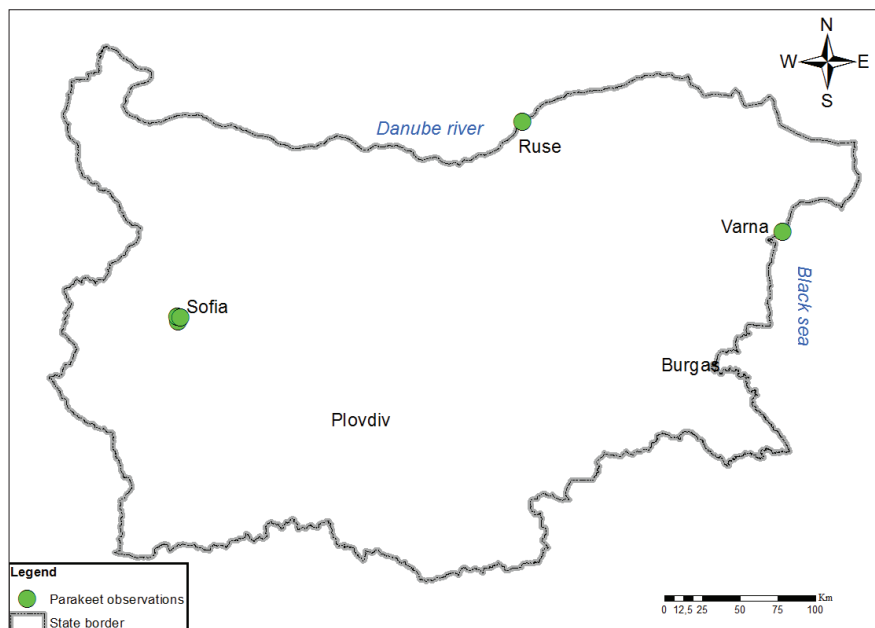
Results and Discussion

Five observations of the occurrence of the Ring-necked Parakeet were documented in different regions in Bulgaria during our study (Table 1, Figs. 1 and 2). Three of the observations were made in the city of Sofia: a group of four birds perching on high trees (in October 2003), a single individual in active flight, west to east (in July 2004), and a single bird perching on a tree (on 20 May 2017, V. Evtimova, personal communication) (Table 1, Fig.

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Table 1. Observations of the Rose-ringed Parakeet (*Psittacula krameri*) in Bulgaria in the period 2003-2017

Date	Location/ Geographic Coordinates	Location/ Site	Number of individuals	Details
October 2003	N 42.671812 E 23.330577	Sofia City	4	Group perching on high trees. Characteristic calls and short flights.
July 2004	N 42.697342 E 23.325578	Sofia City Centre	1	Active flight, west to east.
June 2006	N 43.234657 E 28.001258	Sts. Constantine and Elena University Botanical Garden, Varna City	1	Active flight. Characteristic call. Probably the same bird was observed in the location for two consecutive days.
17 November 2014	N 43.862180 E 25.968833	Ruse Town	1	Flying and perching together with a flock of feral pigeons (Fig. 1).
20 May 2017	N 42.694945 E 23.348113	Sofia City	1	A single bird, perching on a tree. Characteristic calls.

**Fig. 1.** Map of the new findings of the Rose-ringed Parakeet (*Psittacula krameri*) in Bulgaria

1). A single specimen of the Ring-necked Parakeet was observed in Sts. Constantine and Elena University Botanical Garden, Varna Municipality, along the Black Sea Coast (in June 2006). Probably the same bird was found twice in the location for two consecutive days. A single specimen was observed flying and perching together with a flock of feral pigeons in the town of Ruse on 17 November 2014 (Table 1, Figs. 1 and 2).

Most of the observations presented here were generally made in or close to the areas where the species was reported in previous publications for Bulgaria (NANKINOV et al. 2006, IANKOV 2007), excluding the cases from Ruse and Sts. Constantine and Elena resort. NANKINOV et al. (2006) reported 43 findings of the Ring-necked Parakeet for the period

1997-2005, of which 16 in the town of Burgas and neighboring towns along the southern Black Sea Coast, 11 in the city of Varna, northern Black Sea Coast, five in the city of Sofia and Sofia region, two birds in the town of Svishtov, along the Danube River, etc. IANKOV (2007) added four records from the same period (1997-2005), while NANKINOV (2016) added one record from 2016, for towns and villages on the Bulgarian Black Sea Coast. Here we report the occurrence of the Ring-necked Parakeet in two new locations – the town of Ruse, along the Danube River, and Sts. Constantine and Elena resort, where the bird has not been observed till now.

IANKOV (2007) assumed that the observed parakeets in Sofia region have probably escaped from captivity, since all listed encounters are of



Fig. 2. A Rose-ringed Parakeet (*Psittacula krameri*) with a group of feral pigeons (*Columba livia domestica*) in Ruse, 17.11.2014

single individuals. On the other hand, the observed group of four birds in Sofia reported here, as well as other published records of flocks for the area (NANKINOV et al. 2006), suggests that their origin could be connected with the introduced populations in other European countries and Turkey (since the simultaneous escaping of more than one individual

is unacceptable theory). Although there is still no confirmed evidence for successful breeding of the species in Bulgaria, the Rose-ringed parakeet is still observed continuously in the country and in the context of the species worldwide invasion, prevention measures should be taken against expected future introductions.

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