New locality of the invasive Monk parakeet *Myiopsitta monachus* (Boddaert, 1783) in Greece

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Abstract. An adult individual of the Monk parakeet has been recorded in the City of Piraeus (SE Greece), a new unknown so far locality of the species.

Key words: Invasive species, Alien birds in Europe, Parakeets, Birds of Greece, Birds of Balkan Peninsula.

Introduction

The Monk parakeet *Myiopsitta monachus* (Boddaert, 1783) has long been considered an invasive species. Its Neotropical (Bolivia, Argentina, Brazil) natural range today has increased drastically, and the species is found sporadically in various isolated localities with rapidly growing colonies in the parks of cities not only in South and North America, but also in Europe and Asia. Thus, the Monk Parakeets became a globally naturalized species (Pruett-Jones, 2021). In Europe it has already established (mainly in the last 50 years) colonies in Austria, Belgium, Denmark, Great Britain, Czech Republic, France, Germany, Italy, The Netherlands, Portugal, Slovakia, Spain (Lever, 2005, Nankinov, 2006, Juniper & Parr, 2010, Mori *et al.*, 2013).

The most widespread in Europe are two species of parrots – the Rose-ringed Parakeet (*Psittacula krameri* (Scopoli, 1769)) and the Monk Parakeet and both are considered pests (Pruett-Jones, 2021). *M. monachus* and *P. krameri* everywhere demonstrate ecological tolerance and high synanthropy and establish naturalised populations. Recently, *P. krameri* has increased its distribution in some areas of Bulgaria (Grozdanov *et al.*, 2017), but the Monk parrot has not yet been recorded.

The Monk parakeet in Greece

In the last decades *M. monachus* have established a breeding colony in the National Garden in Athens in the central region of the city. Data of the Hellenic Ornithological Society show that the Athens population of both species (*P. krameri* and *M. monachus*) exceeds 1500 birds.

The Monk parakeet has been recorded for the first time in Greece in 2010 in the Parko Scholis Chorofylakis Dimotiko, Katehaki, Athens near the existing zoological garden (Kalodimos, 2013).

City of Piraeus is located 8 km SW of Athens (Fig. 1). Although the city is not administratively united with Athens, today it is practically merged with it, and the two cities form one of the largest urban areas in Europe.

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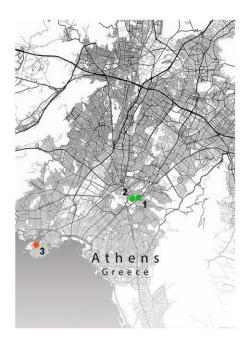


Fig. 1. Map of Athens (After: https://www.posters.bg/marketplace/athens-greece-city-map-white-v105257) with the locations of the sites of records of *M. monachus*: Zoological garden, Athens (1); National Garden, Athens (2); Port of Piraeus (3, present study).

It is important to note that there are no large gardens and parks in the entire urbanized agglomeration of Athens, except for the National Garden in Athens, Areopagus Hill, Lycabettus Hill, Strefi Hill and a few others. All of them have a very limited surface and are tightly surrounded by densely built-up (usually 5-7 storey buildings) areas.

The green parks and gardens are located in the central and the eastern parts of the agglomeration. To the south-west in the direction of Piraeus there is no green space of any kind except for the trees along the major city thoroughfares. This is of particular importance for parrots as highly specialized arboreal (dendrophilous) and frugivorous birds (including the species under consideration). It is worthy to mention, that "Monk Parakeets, compared to other parrot species, do not normally disperse far from their natal locations." (Kalodimos, 2013).



Fig. 2. Adult Monk parakeet *Myiopsitta monachus* (Boddaert, 1783), Piraeus, 21.04.2024. Photograph: Zlatozar Z. Boev.

Observation in Piraeus

So far, there is no evidence of the distribution of *M. monachus* outside the borders of Athens. The Monk parakeets have not been established in the city of Piraeus too. On 21 April 2024 in a group of cypress (*Cupressus* sp.) trees in the region of the Port of Piraeus (37.937536 N, 23.634966 E) an adult bird, producing noisy screams in the air perched on a branch (Fig. 2). The bird held a typical spherical cypress cone in its feet and remained there for about a minute. The weather was clear, calm and sunny with a temperature of around 20° C. The next day individuals of the species were also observed in Athens in the National Garden (Fig. 3).



Fig. 3. Adult Monk parakeet *Myiopsitta monachus* (Boddaert, 1783), National Garden, Athens, 22.04.2024. Photograph: Zlatozar Z. Boev.

Conclusion

Considering that, in addition to Greece, the Monk Parakeet is also known in the Balkans (Turkey and Romania) and Northern Italy, it can be expected that this species will soon appear in Bulgaria as well. It is not clear what its impact would be on local ornithocenoses and habitats, but as a highly adaptable and invasive species, we can assume that it entered into competitive relationships with some tree-nesting and plant (fruit- and seed-)eating bird species.

References

Grozdanov, A. P., Popova, E. D., Peev, S. G. (2017) New Records of the Rose-ringed Parakeet *Psittacula krameri* (Scopoli, 1769) (Aves: Psittacidae) in Bulgaria. *Acta zoologica bulgarica*, Supplement 9: 305-307.

Juniper, T., Parr, M. (2010) Parrots. A Guide to the Parrots of the World. Pica Press, China, 585 pp.

Kalodimos, P. (2013) First account of a nesting population of Monk Parakeets, *Myiopsitta monachus*, with nodule-shaped bill lesions in Katehaki, Athens. *Bird Populations*, 12: 1-6.

Lever, C. (2005) Naturalised Birds of the World. T & A D Poyser. London, 352 pp.

- Mori, E., di Febbraro, M., Foresta, M., Melis, P., Romanazzi, E., Notari, A., Boggiano, F. (2013) Assessment of the current distribution of free-living parrots and parakeets (Aves: Psittaciformes) in Italy: a synthesis of published data and new records. *Italian Journal of Zoology*, 2013, 1-10.
- Nankinov, D. (2006) Allien species of birds in Europe. Sofia. 148 pp. (in Bulgarian).
- Pruett-Jones, St. 2021. (Ed.) *Naturalized Parrots of the World. Distribution, Ecology, and Impacts of the World's Most Colorful Colonizers*. Princeton University Press. Princeton and Oxford, 304 pp.