

Second clutch in urban Common Kestrels *Falco tinnunculus* in Barcelona

Sergi Garcia & Marc Anton

Second clutches in the Common Kestrel *Falco tinnunculus* are extremely rare. Here, we report a case of a second clutch in an urban environment in the city of Barcelona, in 2016 in a nest box located in a window of an inhabited house. This nest box has been used for breeding since 2009. The second clutch had five eggs, laid between 17 and 23 June. Two chicks fledged on 22 August. One fledgling of the first clutch remained with its parents in the nest during the incubation of the second clutch.

Key words: Common Kestrel *Falco tinnunculus*, second clutch, Barcelona.

Sergi Garcia*, Ctra de Juià 46, 17460 Celrà, Girona.

Marc Anton, Nat- Museu de Ciències Naturals de Barcelona, Pl. Leonardo da Vinci, 4-5, 08019 Barcelona.

*Corresponding author: sergi@galanthusnatura.com

Received: 16.06.17. Accepted: 28.06.17. Edited by O. Gordo.

The Common Kestrel *Falco tinnunculus* is an ecologically flexible species that breeds in a wide range of habitats, including urban areas. For instance, the German and Scandinavian common names for the Common Kestrel are *Turmfalke* and *Torenfalke*, respectively, which mean 'tower falcon'. This fact highlights the common occurrence of this raptor in urban habitats (Village 1990), where it shows remarkable adaptability and huge tolerance to high levels of disturbance. The species has been cited in European cities such as Rome (Salvati *et al.* 1999), Warsaw (Zmihorski & Reit 2007) and Berlin (Kübler *et al.* 2005), as well as in the largest Spanish cities (Madrid, SEO/Birdlife 2017; Barcelona, Anton *et al.* 2017; Valencia, Murgui 2014). In Barcelona, the most recent population assessment gives a stable population of 30–35 breeding pairs (Anton *et al.* 2017). Although it will nest in trees, holes in wall, corvid nests or even on the ground (Martí & del Moral 2004), in urban environments the Common Kestrel usually uses holes in buildings or plant pots on window ledges on residential buildings (Anton *et al.* 2017).

The Common Kestrel is usually considered as a single-brooded species (Cramp & Simmons 1980). However, replacement clutches have been reported in some cases, usually when the first clutch has failed or the female has deserted (Village 1990). Exceptionally, second clutches have been reported after a first successful clutch (Fargallo 1996). In this note, we document one of these extremely rare cases of a second clutch in Barcelona, which took place in 2016 after a successful breeding attempt.

Since 2009, Common Kestrels have nested in a nest box close to a window on the tenth floor of an inhabited block of flats in the Horta-Guinardó district in Vall d'Hebron in the city of Barcelona (Spain). Individuals were not ringed and so it is not known how many different individuals have used this nesting site over the years. The average clutch size to date is 6.6 eggs (2009: 6 eggs; 2010: 6 eggs; 2011: 7 eggs; 2012: 7 eggs; 2013: the pair abandoned the nest after laying one egg; 2014: did not breed; 2015: 7 eggs). Most of the chicks usually fledge successfully, although in 2015 only one out of the

seven hatched chicks fledged, the rest probably being predated.

At the beginning of 2016 breeding season, a Common Kestrel pair was seen at the nest and in the nearby area conducting typical courtship displays. However, visits to the nest site became scarcer and finally no adult were seen. Thus, the pair did not initially breed there. However, the fact that adults were seen in the area in April and May suggests that the pair was indeed breeding somewhere in the neighbourhood. Our suspicions were confirmed on 30 May 2016, when agents from the Catalan Rural Ranger Service found a Common Kestrel fledgling in a schoolyard less than 200 m from the above-described nest site. Therefore, the pair had bred somewhere near the traditional nest-box site. The fledgling was taken to the Torreferrusa wildlife rehabilitation centre as the agents were unable to locate the nest site.

On 9 June, however, a pair of Common Kestrels, accompanied by a young fledgling, appeared in the nest box. They fed it with a lizard and a mouse. From 10 June onwards, the adults were seen on several days in the nest box and exhibited mating behaviour. On 18 June, two eggs were observed in the nest box, followed by a third egg on 20 June, a fourth on 22 June, and a fifth on 23 June. At the same time, on 29 June and on 6 July, the young fledgling was also in the nest box, next to the incubating female. On 21 July, the first egg hatched; when checked, only three eggs were found in the nest box and so one had disappeared. On 22 July another chick hatched. No more eggs hatched.

Temperatures ranged between 29 and 31°C on 24 July, which may explain why both adults provided their chicks with shade by opening their wings. Finally, on 21 August the first chick fledged, followed by the second on 22 August.

This represents the first reported second Common Kestrel clutch in Barcelona and confirms the plasticity of the breeding behaviour of this species. In both Spain and Europe, Kestrel clutches are mostly laid between mid-April and mid-May, but no later than early June (Cramp & Simmons 1980, Martínez-Padilla 2016). Thus, the observations of the second clutch reported here fall well outside the usual breeding period for this species in Iberia. However, its phenology fully agrees with a second clutch after a successful first breeding attempt that took place on typical breeding dates.

In fact, the irrefutable evidence that the pair was breeding for the second time in 2016 is the presence of a young fledgling from the previous brood. The parents were able to raise a second brood, while still taking care of juveniles who had already reached the post-fledgling period.

Resum

Segona posta en Xoriguers comuns *Falco tinnunculus* urbans a Barcelona

Les segones postes en el Xoriguer comú *Falco tinnunculus* són extremadament rares. Aquí reportem un cas d'una segona posta en un entorn urbà a la ciutat de Barcelona el 2016. L'esdeveniment va ocórrer en un niu situat en una caixa col·locada a la finestra d'una casa habitada del barri de la Vall d'Hebron. Aquesta caixa s'havia estat usant amb èxit per a la cria des de 2009. No obstant això, el 2016 no va criar en aquest niu en les dates típiques, tot i la presència d'una parella en actitud reproductora a l'inici de la temporada. A partir del 9 de juny va aparèixer a la caixa de nou una parella, que finalment va pondre 5 ous entre el 17 i el 23 de juny, dels quals únicament van descloure dos el 21 i el 22 de juliol. Els polls van abandonar finalment el niu el 22 d'agost. El fet que un juvenil de l'any estigués present a la caixa niu amb regularitat durant la incubació i fos alimentat pels adults demostra que aquella parella estava fent una segona posta.

Resumen

Segunda puesta en Cernícalos vulgares *Falco tinnunculus* urbanos en Barcelona

Las segundas puestas en el Cernícalo vulgar *Falco tinnunculus* son extremadamente raras. Aquí reportamos un caso de una segunda puesta en un entorno urbano en la ciudad de Barcelona en 2016. El evento ocurrió en un nido situado en una caja colocada en la ventana de una casa habitada del barrio de la Vall d'Hebron. Esta caja llevaba usándose con éxito para la cría desde 2009. Sin embargo, en 2016 no crió allí en las fechas normales, pese a la presencia de una pareja en actitud reproductora al inicio de la temporada. A partir del 9 de junio apareció en la caja de nuevo una pareja, que finalmente puso 5 huevos entre el 17 y el 23 de junio, de los cuales únicamente eclosionaron dos el 21 y el 22 de julio. Los pollitos abandonaron finalmente el nido el 22 de agosto. El hecho de que un juvenil del año estuviese presente en la caja nido con regularidad durante la incubación y fuese alimentado por los adultos, demuestra que aquella pareja estaba realizando una segunda puesta.

References

- Anton, M., Herrando, S., Garcia, D., Ferrer, X. & Cebrian, R. (eds.).** 2017. *Atlas dels Ocells Nidíficants de Barcelona*. Ajuntament de Barcelona: Barcelona/Institut Català d'Ornitologia/Universitat de Barcelona/Fundació ZOO Barcelona.
- Cramp, S. & Simmons, K.E.L. (eds.).** 1980. *The Birds of the Western Palearctic*. Vol 2. Oxford: Oxford University Press.
- Fargallo, J.A., Blanco, G. & Soto-Largo, E.** 1996. Possible second clutches in a Mediterranean montane population of the Eurasian kestrel (*Falco tinnunculus*). *J. Raptor Res.* 30: 70–73.
- Marti, R. & del Moral, J.C. (eds.).** 2003. *Atlas de las aves reproductoras de España*. Madrid: Dirección General de la Conservación de la Naturaleza- Sociedad Española de Ornitología.
- Martínez-Padilla, J.** 2016. Cernícalo vulgar *Falco tinnunculus*. In Salvador, A. & Morales, M. B. (eds.): Enciclopedia Virtual de los Vertebrados Españoles. Madrid: Museo Nacional de Ciencias Naturales. <http://www.vertebradosibericos.org>
- Murgui, E.** 2014. Population trends in breeding and wintering birds in urban parks: a 15-year study (1998–2013) in Valencia, Spain. *Revista Catalana d'Ornitologia* 30: 30–40.
- Riegert, J., Fainová, D., Mikeš, V. & Fuchs, R.** 2007. How urban Kestrels *Falco tinnunculus* divide their hunting grounds: partitioning or cohabitation? *Acta Ornithol.* 42: 69–76.
- Salvati, L., Manganaro, A., Fattorini, S. & Piattella, E.** 1999. Population features of kestrels *Falco tinnunculus* in urban, suburban and rural areas in Central Italy. *Acta Ornithol.* 34:53–58.
- SEO/BirdLife.** 2017. <https://www.seo.org/2016/07/18/los-cernicalos-tambien-crian-madrid/>
- Village, A.** 1990. *The Kestrel*. London: T & A D Poyser.
- Žmihorski, M. & Rejt, Ł.** 2007. Weather-dependent variation in the cold-season diet of urban Kestrels *Falco tinnunculus*. *Acta Ornithol.* 42: 107–113.