

BUTEO RUFINUS (CRETZSCHMAR, 1829), A NESTING SPECIES IN SOUTH-WEST ROMANIA

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Abstract. In the 19th century, the long-legged buzzard (*Buteo rufinus*) was present in the Balkans as a nesting bird species only in Greece. The 20th century debuted with an enlargement of its area toward north, to reach Hungary, south-west Romania, south Ukraine and up to the border with Kazakhstan at the beginning of 2013. Our observations come from south-west Romania, where we first found the species nesting, in Oltenia. This paper presents the history of this bird distribution in south-east Europe and its expansion in Romania. New nesting points are added to complete information and distribution maps of the species *Buteo rufinus*. Our observations were carried out between January 2017 and September 2018, in Mehedinți County, the administrative area South-West - Oltenia, with a mosaic of habitats: crops, pastures, forests, and uncultivated areas. Inventorying and monitoring the species took place in 15 locations of the county. Nesting was monitored with a camera with motion sensor and data collecting regarding young development and other ethological aspects will be researched in the future.

Keywords: *Buteo rufinus, Long-legged Buzzard, Romania, expansion, breeding*

INTRODUCTION

The distribution of the long-legged buzzard (*Buteo rufinus*) in the palearctic perimeter concentrates particularly in the warm, dry areas of the south (BALTAG ET AL., 2012). It hunts there in open spaces, avoiding dense vegetation, which allows it to find and pursue its prey easier (FRIEDEMANN ET AL., 2010).

In Romania, there are plenty of data on the presence of the long-legged buzzard. The first ones come from the 19th century, when two individuals were seen at Nădășelu (1891); in the 20th century, there are more mentions: one individual at Fărăgău (1920), four at Târgu Secuiesc (1927), one at Gilău (1962), four near Cluj (1962), two at Lăzarea (1975), one at Chiheru-de-Jos (1975), and another one at Reghin (1975) (data from Klemm Werner & Kohl Stefan's (1988) work *Die Ornis Siebenbürgens*, vol. III, in *Studia Transylvanica* 8/III, Köln, Wien, p. 74).

Until three decades ago, the long-legged buzzard was considered, in Dobrogea (south-east Romania), a passage bird both in the fall and in spring (because of the expansion of the population from the Balkan Peninsula to the north, to Bulgaria, which occurred around 1950 (SIMEONOV, 1990, IN MUNTEANU, 2009), to be seen in Romania as a hatching bird. The first mention not endorsed by a certain observation belongs to Brehme, in 1992 (MUNTEANU ET AL., 1997). The first article in Romanian literature documenting the nesting of the species in Dobrogea, at Cheia, on the shelf of an abrupt rock, dates from 1996 (SCHMITZ, 1996).

The number of pairs of long-legged buzzards in Romania increased from one year to another; if, in 1996, Schmitz estimated a population of 5-15 pairs, in 2002 it reached 10-20 pairs (MUNTEANU, 2002) and, in 2003, 25-65 pairs (DARÓCZI & ZEITZ, 2008). The trend is an ascending one.

According to information published by Daróczi and Zeitz in a wider study, the population reached 100-180 pairs in 2008 (Daróczi & Zeitz, 2008). Some authors found that, in north Dobrogea, there is a higher frequency of long-legged buzzard than that of common buzzard (*Buteo buteo*) claiming that the species was abundant in 1970 but not enough studied (DANKO, 2012).

Since 2003, there are observations on reproduction period in west Romania as well (DARÓCZI & ZEITZ, 2008).

In west Romania, the species was spotted in Lunca Mureșului and in the valleys of the tributaries of this river at Bata-sat, Bulci, Valea Mare, Căprioara, Pojoga, Valea Crăciuneasa, Toc, Stejar (December 2011), Socodor – forest (August 2013), where they identified a nest with young (2012, destroyed in 2013), Socodor – fishery (September 2013), Adea, Râtu Mare, Râtu Mic, Râtu Pil, Sintea Mare, Teuz, Sepreuș (2013-2014), Pâncota – Dud (May, June, December 2014), in Câmpia Cermeilului and in the Metaliferi Mountains, at Trestia (March 2018).

For south-west Romania (Caras-Severin County), the long-legged buzzard was seen in Cheile Nerei (2012 - 2013, a period during which it was seen nesting), Ilidia (March 2013); Cheile Rudăriei (April 2013, flight over Cioaca Mare, together with other observations). For the south of Câmpia Română, there are two observations at Bistreț (March, September 2015) (Stănescu, personal observations).

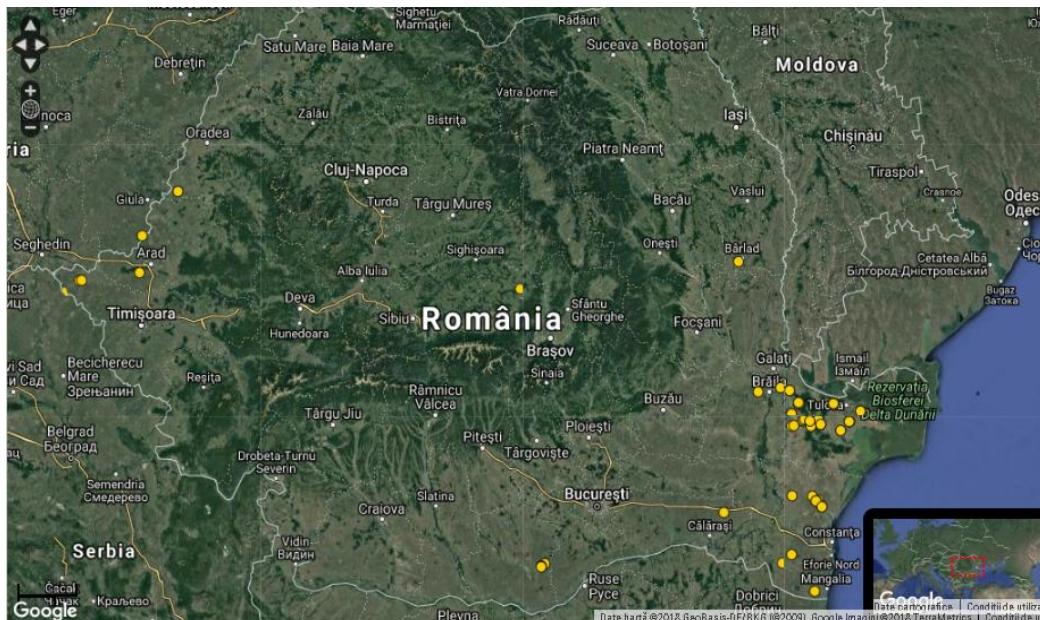


Figure 1.The distribution of the species *Buteo rufinus* in Romania: nesting places until the moment of this study (<http://www.openbirdmaps.ro/>)

In 2007, they discovered the first nesting pair in Moldova (Baltag, 2007). Daróczi, Hegyeli & Nagy found, in the Arad County, at Bodrogu Nou, a nest of long-legged buzzard (DANKO, 2012). Another observation comes from Felnac, April 2018 (Daróczi in litt.).

In 2006, observations made pointed to a nesting place at Cenad, Timiș County, and in 2011, they found another nest near Sânnicolau, on a high voltage pole (Danko, 2012); there are other observations in the Sânnicolau area (May 2018).

For west Romania and for 2012, Danko (2012) estimated a population of *Buteo rufinus* of about 10-30 pairs (nesting).

In Mehedinți, without certain proofs, the species would have nested near Dobra. For the same period, at Gubacea - Dolj, they identified a nest (SANDOR in litt.).

MATERIAL AND METHOD

Our observations were made between January 2017 and September 2018, in southwest Romania, in the Mehedinți County, over a mosaic of habitats: crops, pastures, forests, and uncultivated areas. Identifications in the area are few and, in most cases, they refer to solitary or migrating birds. Our first observations were occasional, with binoculars, in the first part of 2017; after locating the area frequented by the long-legged buzzard, we checked the area to find a nest; to do so, we checked old, tall trees and high voltage poles that could have been good places for nests. Observations were also made on the territory of 15 localities: Gruia, Pristol, Gârla Mare, Vrata, Salcia, Obârșia-de-Câmp, Gemeni, Dârvari, Cujmir, Vânători, Braniștea, Roșiori, Punghina, Cearângul, and Recea.

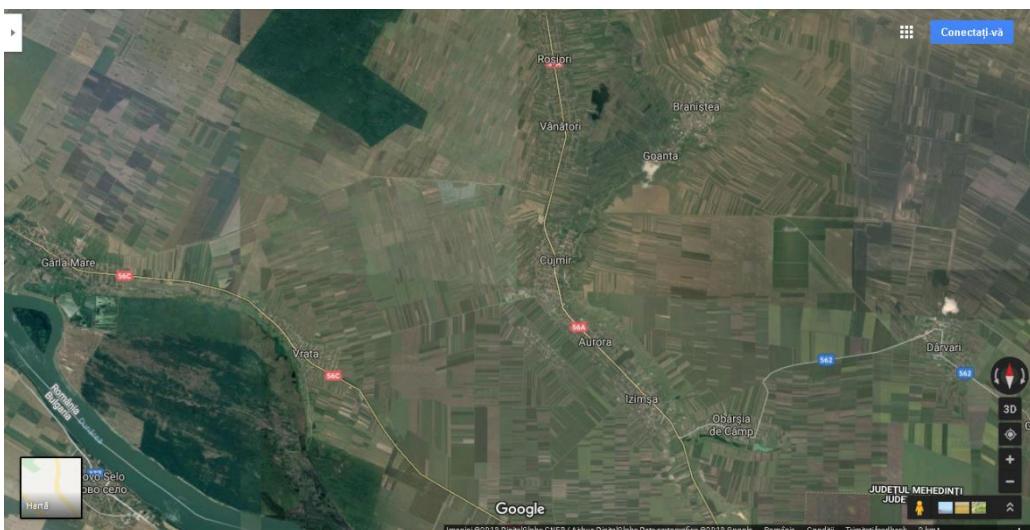


Figure 2.Map of study area for *Buteo rufinus*

At the beginning of summer (June 2017), we identified a nest next to the Natura 2000 Gruia – Gârla Mare site, an area characterised by a plane area of crops with old oak trees. Once we identified the nesting place, we made punctual observations twice a week during the first hours of the day.

In February 2018, we set a trap photo camera in the common oak (*Quercus robur*) hosting the nest, a camera that we disguised to avoid disturbing the nesting pair. For other photos, we used a Canon 70D and a sigma 150-600 mm Contemporary objective.



Figure 3.The colony of *Passer hispaniolensis* in the common oak canopy and the nest of *Buteo rufinus* in Mehedinți County, at the beginning of 2018

RESULTS AND DISCUSSION

Located in the Danube meadow, the studied area is characterised by a rich biodiversity: with its about 160 bird species (BIRĂU ET AL., 2018), it is an important avifauna point in south-west Romania.

In the last years, the presence of the long-legged buzzard was mentioned regularly in the localities we investigated: the first observation was in January 2014, at Vrata, followed by those in 2017, at Salcia, Vrata, Cujmir, Izimşa, Obârşia de Câmp or Brănişte (OACHEŞ, T., DENICU P., DIACONESCU D., AND BIRĂU A. participated in the monitoring), without proving the nesting by the species.

It is known that long-legged buzzard prefers nesting on rocks (Alivizatos *et al.*, 1998; Mullarney *et al.*, 1999), and only occasionally in trees (Shirihai, 1996).

The nest we found is in an oak tree, 10 m high, which confirms the ability of the species to adapt to the environmental offer (FRIEDMANN ET AL., 2010), an offer sustained by the large number of European ground squirrels (*Spermophilus citellus*), the main trophic source of this rapacious; according to some authors, the distribution of the long-legged buzzard corresponds to the distribution of the European ground squirrel (TUCKER & HEATH, 1994).

Winter occurrences are few yet concrete for Romania. We assume that the birds we monitored did not leave the area, at least during our study.

At the beginning of March 2018, images obtained with a motion sensor camera confirmed egg laying and nesting. The next month, the female left the nest a few times, with the male replacing her rarely, particularly in the afternoon. During the entire interval, the male stayed close to the nest, which we saw several times. During the nesting period, the birds were aggressive, trying to chase away even humans within the perimeter whose diameter was about 200 m.



Figure 4. *Buteo rufinus* with its prey, a European ground squirrel (*Spermophilus citellus*);
63-day old young near the nest (@ Alexandru Birău)

During hot days, there were moments when the female only shadowed the eggs for a few minutes, adopting the proper posture on the edge of the nest. The male constantly fed the female and supplied her with twigs to be added to the nest structure.

Starting with April 20, 2018, numerous Spanish sparrows (*Passer hispaniolensis*) stationed on the oak tree branches and started building their nests (40-50) in the upper part of the canopy, a colony that had been there in previous years as well.

At the beginning of May, two chicks hatched that were successfully bred.

CONCLUSIONS

Long-legged buzzard (*Buteo rufinus*) is a rapacious species whose area is extending in Romania. If, in the past, it was a passage bird, information about its nesting are multiplying. The paper is a synthesis of the species distribution in times and it presents the last mentions regarding nesting places, including a new location in Oltenia. The study was carried out over 15 localities; the nest area was constantly monitored with an automated photo camera. Even if

the long-legged buzzard prefers rocky areas to nest, it adapted to the conditions in Oltenia and built a nest in a tall, old oak tree. The main trophic source in the area are European ground squirrels. Other aspects regarding the behaviour of the species during breeding are studied by monitoring the same nest since the pair has not left it so far.

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