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ORIGINAL ARTICLE

# Great spotted cuckoo *Clamator glandarius,* a new species for Azerbaijan and the Nakhchivan Autonomous Republic

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*Clamator glandarius* is reported from the Nakhchivan Autonomous Republic. During the first field trip, one individual was observed, and two individuals during the second trip for species mating were registered. **Keywords:** Great spotted cuckoo, Nakhchivan Autonomous Republic, mating, breeding season

### Introduction

The Caucasus is one of the biodiversity hotspots, including Georgia, Azerbaijan (Nakhchivan AR), Armenia, and partly northern Iran (Fig. 1). According to Conservation International and WWF, this region is home to many endemic species and is one of the essential hotspot regions in terms of biodiversity (https://www.caucasus-naturefund.org/ecoregion/). The formation of the Caucasus goes back to the Oligocene age (33.7–23.8 Ma); while it was a small continental island in this period, it became a natural barrier by rising at the end of the Pliocene (5–2 Ma) (Demirsoy, 2008). The Caucasus Mountains are divided into two parts: the North Caucasus known as Ciscaucasia in Europe, the North Caucasus as known Ciscaucasia in Europe, the North Caucasus as known Ciscaucasia in Europe, and the South Caucasus (Transcaucasia) in Asia, respectively. The Greater Caucasus mountain range in the north is mainly shared by Russia and Georgia and the northernmost parts of Azerbaijan. The Lesser Caucasus mountain range in the south is occupied by several independent states, namely, Armenia, Azerbaijan (Nakhchivan AR), and Georgia, and extends to the northeastern parts of Turkey and northern Iran.

The Nakhchivan Autonomous Republic (NAR) forms a part of Azerbaijan and has a very high biodiversity with diverse landscapes and varied climatic conditions, making it attractive as a research subject. From a geological point of view, the NAR lies at the southeast end of the Lesser Caucasus Mountains, an important part of Western Asia containing many endemics amongst its flora and fauna. The NAR also has representatives of flora and fauna from other biogeography regions. A large part of the NAR is considered a priority corridor of the Caucasus Ecoregional Hotspot. However, scientific data about the NAR bird fauna still reflects the situation at the end of the 19th century (Mammadov, 2006). During the last 15-20 years, there have been noticeable changes in the structure of agriculture, the creation of new wildlife protected areas, and regular conflicts on the border with Armenia (Mammadov, 2010; Patrikeev, 2004). Thus, a current review of bird species in the NAR was required.

# Methods

We registered the birds at a distance of 1-2 km with a field telescope and 100-200 m with binocular surveys during our observations. Camera Eos 400 D and two different camera lens Canon 75-300 mm and 18-55 mm, Tamron 1.4x, teleconverter, 20x60 Swarovski field telescope, and binocular Nikon 10-22x50 had been used. The morphological and ecological features of the species were determined with photographs and Collins Bird Guide (Svensson et al., 2009).

## Results

Creat Spotted Cuckoo in Azerbaidjan for the first time was registered on April 26, 2013, near the region Shahbuz district Badamı village of Nahkhchivan AR (39.467286 N, 45.508378E), (Figs. 1-2).

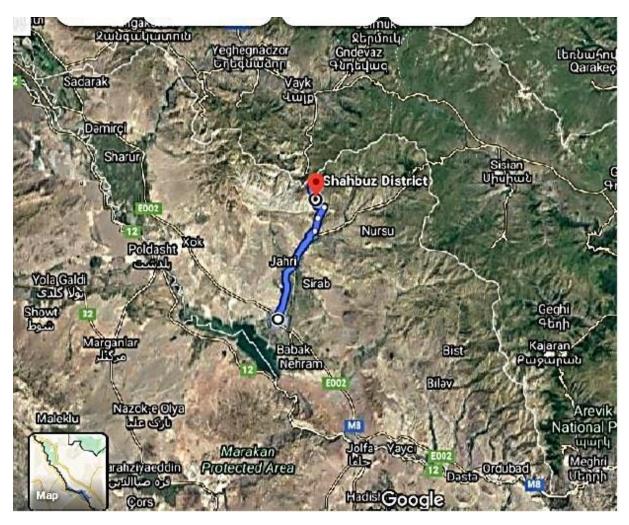


Fig. 1. The area where Great Spotted Cuckoo is observed (Badamı village).



Fig. 2. Great Spotted Cuckoo at the roosting site

The second discovery of an adult bird was on April 26, 2018, when it was mated near the village of Kolani in the Sahbuz district (39.44763N, 45.65250 E, Fig. 3).



Fig. 3. The area where Great Spotted Cuckoo was registered (village of Kolanı).

However, there is no information about nesting in the area. The bird was observed for about an hour; before flying away, we heard a twice loud and drawn-out "kiii-ah" sound.

### Discussion

Great Spotted Cuckoo *Clamator glandarius* (Linnaeus, 1758) is widely distributed in tropical Africa, the Middle East, and the Mediterranean part of Europe. In the central part of its range, populations of the crested cuckoo are sedentary, while South African, Middle Eastern, and European populations migrate.

It is assumed that all bird populations winter in the African continent. Great Spotted Cuckoo is an obligate nesting parasite. The breeding species of the Great Spotted Cuckoo include mainly corvids, as well as some long-tailed and spray starlings, which nest in hollows, in burrows in sandy cliffs, and in piles of stones (*Lamprotornis* spp., *Onychognathus* spp., *Spreo bicolor*) (Cramp 1985; del Hoyo et al. 1997). Raven guarding birds are represented by blue *Cyanopica cyanus* and common *Pica pica* magpies, black *Corvus corone*, and gray *C. cornix* crows, sporadically and locally *Garrulus glandarius* jay, *Pyrrhocorax pyrrhocorax* bough, *Corvus monedula* jackdaw, *C. monedula* common, and *Corvus corax* bristly black C. *rhipidurus*.

The breeding season of the Great Spotted Cuckoo in the Mediterranean and Europe is synchronized with the breeding season of the main breeding species (magpie) and is confined to the end of April - the beginning of June. Chicks leave the nest at the end of May, and until they leave for the winter, they can occur up to November (Cramp, 1985; Numerov 1993). In Spain, adult birds leave their breeding grounds in mid-June, while juveniles remain until early August (del Hoyo et al., 1997). Landings of the crested cuckoo are known in most Western European countries, Eastern European countries, and Turkmenistan (Cramp, 1985; Numerov 1993). The species was reported for the Turkey area (Lepage, 2021), while it was not registered for the territory of the Azerbaijan (Clements, 2000; Gill & Donsker. 2019; Lepage, 2007) and Nakhchivan Autonomous Republic before.

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