



Short communication

Maghreb Magpie *Pica mauritanica* Malherbe, 1845 winters in two oases at Aurès Mountains, Algeria (Aves: Corvidae)

Habib Bouletif^a Abdelwahab Chedad^{b,c} * and Amor Bendjedidi^c

^a . Naturalist, NatAurès, Algeria

^b Department of Biological Sciences, Laboratory of Saharan Bio-resources: Preservation and Valorisation, University Kasdi Merbah, Ouargla, Algeria

^c Directorate of Forest Conservation of Ghardaïa (General Directorate of Forestry), Ghardaïa, Algeria

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ABSTRACT

New data on wintering and range expansion of Maghreb magpie *Pica mauritanica* Malherbe, 1845 in two oases. The first record is in the extreme south of the Aurès at Ghoufi (March 2019) and the second observation was at the North Biskra These data represent the first report of Maghreb magpie in this region, in two oases at Aurès Mountains (Biskra and Batna, Algeria).

Faculty of Natural Sciences and Life, University of El Oued.

1. Introduction

Pica Brisson, 1760 is the genus of family Corvidae, *Pica pica* (Linnaeus, 1758) comprises the six subspecies in the north Eurasian clade; *P. mauritanica* Mal-herbe, 1845 (monotypic); *P. asirensis* Bates, 1936; *P. bottanensis* Delessert, 1840 (monotypic); *P. serica* Gould, 1845 (with subspecies *P. s. serica* and *P. s. anderssoni* Lönnberg, 1923); *P. hudsonia* (Sabine, 1823); and *P. nutalli* (Audubon, 1837). This species is widely distributed in northern Eurasia, East Asia, and North America, there are some genus (*Pica*) isolated populations, such as *P. p. mauritanica* in the Maghreb region of northwest Africa, *P. p. asirensis* in Saudi Arabia, and *P. bottanensis* on the Qinghai-Tibet Plateau [1].

Globally, the Maghreb magpie is categorized as a species of least concern (LC) on the IUCN Red List [2] and at the national level; it is protected by Algerian fiat about executive Fiat

12-235 of 24 May 2012, establishing the list of protected non-domestic animal species. This species is considered as endemic in the northwest African, with a bright blue facial skin in combination the slight plumage and more pronounced structural differences [3].

Maghreb magpie is a resident breeder in Algeria. Patchily distributed in low densities in the semi-arid area at Aurès, Saharan Atlas (Djelfa and Djbel Amour), Hodna Massif, scrub and pinewood in the Tlemcen, Daia, Frenda and Saida Mountains, Ain Skhouna, Ouarsenis Mountains (Theniet El Had, Khemis Miliana, Media and Ksar El Boukhari [4], other observations at Mascara south and western Relizane [5], as well as Merine forest in Sidi Bel Abbes [6]. The aim of this study is to highlight the role of oases as a refuge for certain bird species, especially during the winter season, such

* Corresponding author :Chedad Abdelwahab Tel.: 00213778610632

E-mail address: agrochedad@yahoo.fr

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as Maghreb Magpie in two oases at Aurès Mountains (Biskra and Batna, Algeria)

2. Materials and methods

This study was carried out in North Biskra at El Kantara oases, located in the extreme south of Aurès Mountains, (Fig 02), which is part of the semi-arid bioclimatic. Counts were undertaken by direct observation using a Canon 7d camera, during the period between 2016 and 2021, with seasonal surveys, reinforced by additional surveys especially during the migration seasons of birds [7]. Identification of bird species was facilitated by ornithological guidebooks [8].

3. Results and Discussion

During this study, 145 species were inventoried across all El Kantara regions, between landbirds and waterbirds. This study revealed a new distribution record for one species in the Algerian Sahara, *Pica mauritanica* with two localities. The first record in Biskra North, in one of the oases of El Kantara (35°13'5.20"N5; °42'7.70"E) (Fig 02), at the beginning of January 2022 at the mouth of the Algerian Sahara, when this region characterized by an abandoned orchard of pomegranate, olive and apricot trees, a group of seven Maghreb magpie were observed consume the fruits of the date palm, and they dig up the soil to extract the larvae from it. The second observation is at the extreme south of the Aurès at Ghoufi (6°12'25.11"E; 35° 4'50.65"N) (Fig 02), where we observed two birds in March 2019.



Fig. 1. Maghreb Magpie *Pica mauritanica* consuming date palm fruit in El Kantara, Biskra.

This widespread Palearctic crow breeds from the boreal taiga to the Mediterranean region, and in steppe and semi-desert zones in the south [9], and in Algeria, this species is also a sedentary breeder [4]. Our observations in the El Kantara and Ghoufi region are considered new, when this species is a winter visitor, this is based on old and new observations in this area, including the work of Isenmann and Moali [4], observations in GBIF [5], as well as [10, 11, 09], since its presence was never mentioned in the oases, especially in the previous two regions. In addition, in the Aurès Mountains, the lowest height at which this species has been observed is 700 meters, this coincides with our observations in the Ghoufi region but differs from others in the El Kantara region, where the altitude reaches 500 meters.

This explains its presence in oases, especially abandoned ones, which contain a lot of fruits, forcing Magpies to carry out a partial migration, in order to spend the winter in these areas and look for food.

The range of several species of land birds have been recorded as extending southwards, including the case of Eurasian collared dove *Streptopelia decaocto* in Tamanrasset [12], as well as several species of Fringillidae such as Eurasian siskin *Spinus spinus*, European serin *Serinus serinus*, European greenfinch *Chloris chloris*, Common linnet *Linaria cannabina* and Hawfinch *Coccothraustes coccothraustes* in Ghardaïa [13], and as well as a record of some wheatear species [14, 15], also at Ghardaïa, House sparrow *Passer domesticus* and House bunting *Emberiza sahari* in the extreme southwest at Tindouf [15, 16 and 17].

In parallel, the expansion has also affected some waterbirds species such as European golden plover *Pluvialis apricaria*, Black stork *Ciconia nigra*, Western reef heron *Egretta gularis*, and Common crane *Grus grus* [18].

The presence of the Maghreb magpie in El Kantara and Ghoufi is interesting and it is necessary to intensify the monitoring in the future in order to clarify the origin and the enology status of this species.

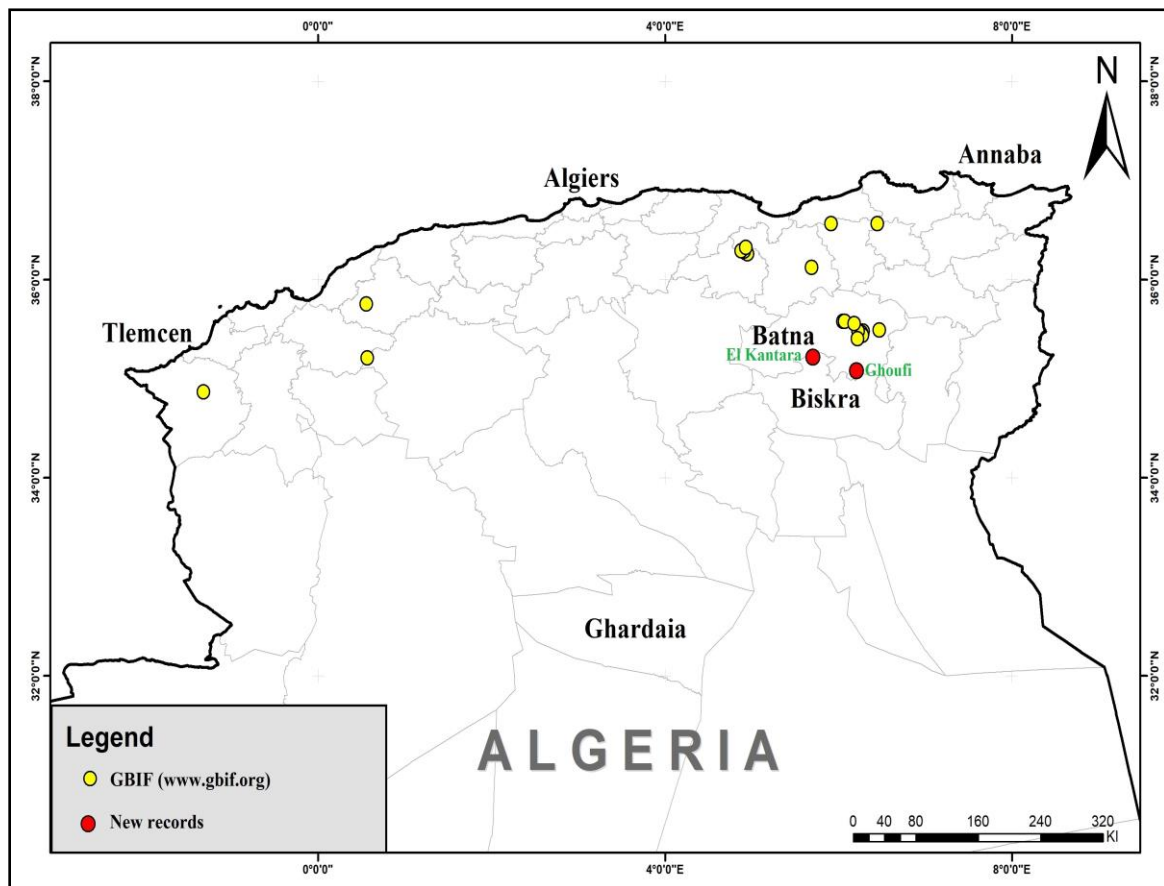


Fig. 2. Maps showing previous and updated distributions of Maghreb Magpie *Pica mauritanica* in Algeria (www.gbif.org), with new records.

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