

# STUDY OF TERRESTRIAL MIGRATORY BIRDS COMING TO THAR DESERT OF JAISALMER, RAJASTHAN DURING MONSOON AND WINTER SEASON

Tansukh Barupal<sup>1</sup>, Shyam Sunder Meena<sup>1</sup> and Mukesh Meena<sup>2</sup>

<sup>1</sup>S.B.K. Govt. P.G. College, Department of Botany, Jai Narain Vyas University, Jodhpur – 345001 Rajasthan, India

<sup>2</sup>Laboratory of Phytopathology and Microbial Biotechnology, Department of Botany, Mohanlal Sukhadia University, Udaipur – 313001, Rajasthan, India.

**Abstract:** Jaisalmer is a part of the western arid zone of India and was once considered as golden city of the former princely state of Marwar, Rajasthan. It is also a main district to the Great Indian Desert, the Thar. Ecologically, the fauna and flora represent those of a typical desert. In the recent past, environmental conditions have changed substantially in Jaisalmer district, associated with the replacement of several desert species. An ample supply of water through the Indira Gandhi Canal has led to a strongly modified overall ecological scenario of Thar Desert. Many foreign birds come to Thar desert for feeding, shelter and reproduction. In the present study total seventeen foreign birds species have been reported in Thar desert during monsoon and winter season.

**Keywords:** Thar Desert, Monsoon, Winter, Fauna, Flora

## INTRODUCTION

Western Rajasthan, Jaisalmer region has some economic, demographic and cultural patterns which are distinct from other parts of Rajasthan, and more closely resemble those of Haryana and Uttar Pradesh (Souza, 1983). The desert of Thar is ecologically very rich of flora and fauna give immense pleasure of migrating bird. Therefore, different and huge numbers of migratory birds come to the Thar desert.

## MATERIAL AND METHOD

Extensive survey of the nesting, roosting and feeding site of foreign migratory was done and data recorded with high resolution camera canon 600d with 250-600 mm tamron lense 18 mega pixal.

## RESULTS

Our results shown that total eleven foreign birds species have been reported in Thar desert during monsoon and winter season. Details of all the birds are given below:

### MIGRATORY BIRDS COMING TO THAR DESERT OF JAISALMER, RAJASTHAN DURING MONSOON

1. **European Roller:** its current binomial name is *Coracias garrulous* (Linnaeus, 1758). The type locality is Sweden. It is also called blue roller, common roller, Eurasian roller. The European roller is a stocky bird, the size of a Eurasian jay at 29–32 cm in length with a 52–58 cm wingspan (Svensson, 2009). The European roller is shown in Fig. 1A.
2. **Red Backed Shrike:** Its binomial name is *Lanius collurio*. It is a carnivorous passerine bird and member of the shrike family Laniidae. This bird is 16–18 cm long migratory bird eats large insects, small birds, frogs, rodents and lizards. The nickname of this is "butcher bird." This bird breeds in most of Europe and Western Asia and winters in tropical Africa. The figure of this bird is shown in Fig. 1B.
3. **Rufous Tailed Scrub Robin:** Its binomial name is *Cercotrichas galactotes*. The rufous-tailed scrub robin is a medium sized bird member of the family Muscicapidae. It is also called rufous scrub robin, rufous bush chat, rufous bush robin (Lepage, 2013). Rufous tailed scrub robin is shown in Fig. 1C.
4. **Spotted Flycatcher:** The spotted flycatcher (*Muscicapa striata*) is a small passerine bird. It breeds in most of Europe. This is an ordinary looking bird with long wings and tail. The spotted flycatcher is a small slim bird, around 14.5 cm in length, with a weight of 14–20 g. It has dull grey-brown upper parts and off-white under parts. Spotted flycatcher is shown in Fig. 1D.
5. **Red Tailed Shrike:** It is also member of the shrike family Laniidae. Its binomial name is *Lanius phoenicuroides*. It is called Turkestan shrike (Message, 2001). The plumage is a sandy colour. It has a red tail (Worfolk, 2000). The figure of this bird is shown in Fig. 1E.

6. **Rufous Tailed Lark:** Binomial name is *Ammomanes phoenicura*. Sometimes called the rufous-tailed finch-lark, is a ground bird found in the drier open stony habitats of India and parts of Pakistan. The species has a wide curved beak with the nostrils covered by feathers. The figure of this bird is shown in Fig. 1F.

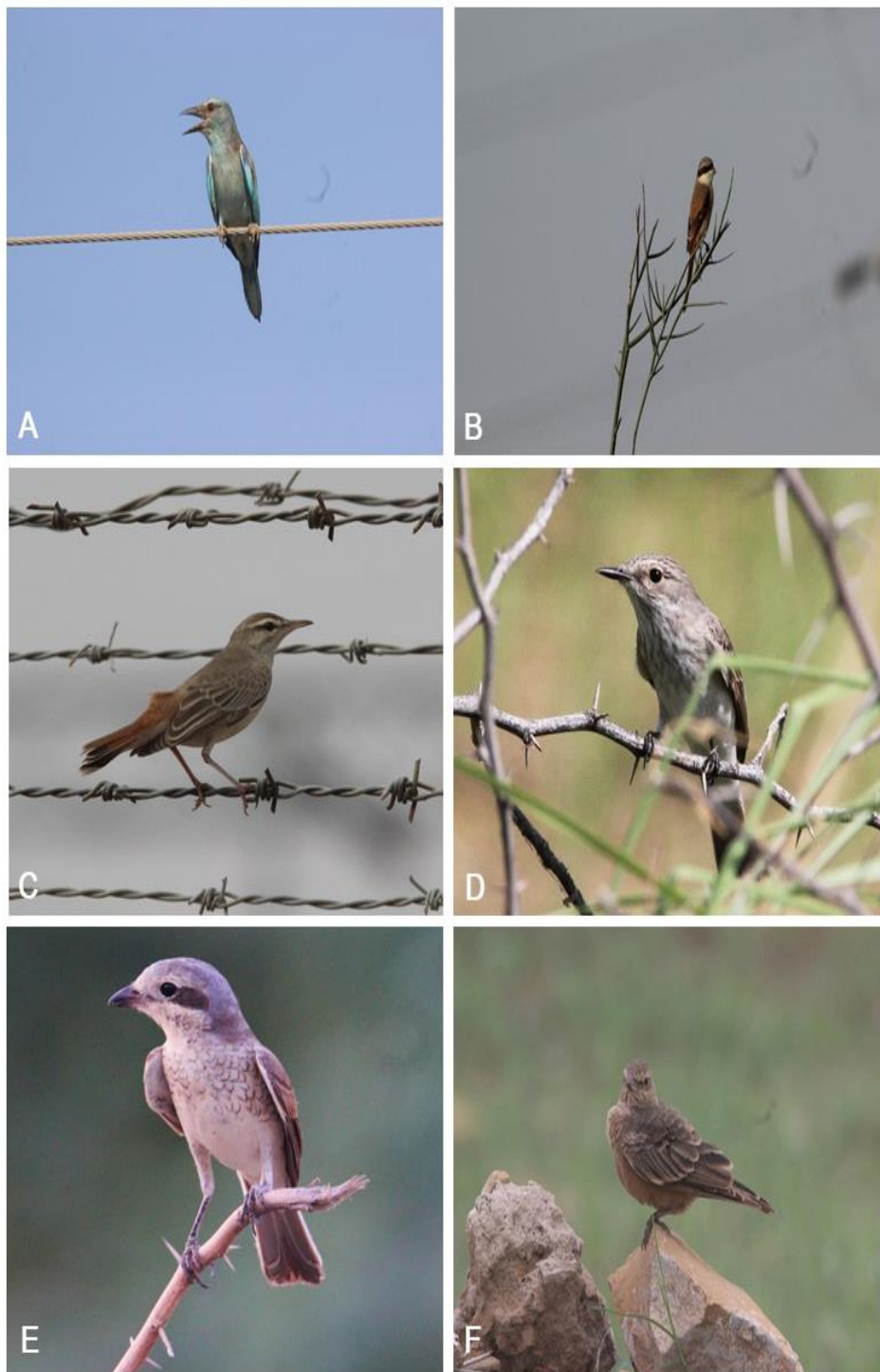


Fig.1. Migratory birds coming to thar desert of jaisalmer, rajasthan during monsoon

#### MIGRATORY BIRDS COMING TO THAR DESERT OF JAISALMER, RAJASTHAN DURING WINTER

1. **Black Red Start:** Its binomial name is *Phoenicurus ochruros*. Now, it is known as Old World flycatcher. The black redstart is 13–14.5 cm in length and 12–20 g in weight, similar to the common red start. In Britain, it is most common as a passage and winter visitor, with only 20–50 pairs breeding (Holling, 2010). This bird is shown in Fig. 2A.

2. **European Scops Owl:** Its binomial name is *Otus scops*. also known as the European scops owl or just scops owl, is a small owl in the typical owl family Strigidae. The Eurasian scops owl was formally described by Swedish naturalist Carl Linnaeus in 1758 in the tenth edition of his *Systema Naturae*. The Eurasian scops owl is 19–21 cm in length with a wingspan of 47–54 cm. It takes small prey such as insects and other invertebrates. It is largely nocturnal. The figure of this bird is shown in Fig. 2B.

3. **Red Breasted Flycatcher:** Its binomial name is *Ficedula parva*. The red-breasted flycatcher is a small passerine bird in the Old World flycatcher family. It breeds in Eastern Europe and across Central Asia and is migratory, wintering in south Asia. The

breeding male of this small 11–12 cm long flycatcher is mainly brown above and white below, with a grey head and orange throat. This bird is shown in Fig. 2C.

4. **Taiga Flycatcher:** Its binomial name is *Ficedula albicilla*. The common name of taiga flycatcher is red-throated flycatcher. It is a migratory bird in the family Muscicapidae. The species was first described by Peter Simon Pallas in 1811. The female has brown upper parts with a blackish tail flanked by white. The genus name is from Latin and refers to a small fig-eating bird. This bird is shown in Fig. 2D.

5. **White Eyes Buzzard:** Binomial name is *Butastur teesa*. The white-eyed buzzard is a medium-sized hawk, distinct from the true buzzards in the genus Buteo, found in South Asia. This slim and small hawk is easily identified by its white iris and the white throat and dark mesial stripe. The figure of this bird is shown in Fig. 2E.

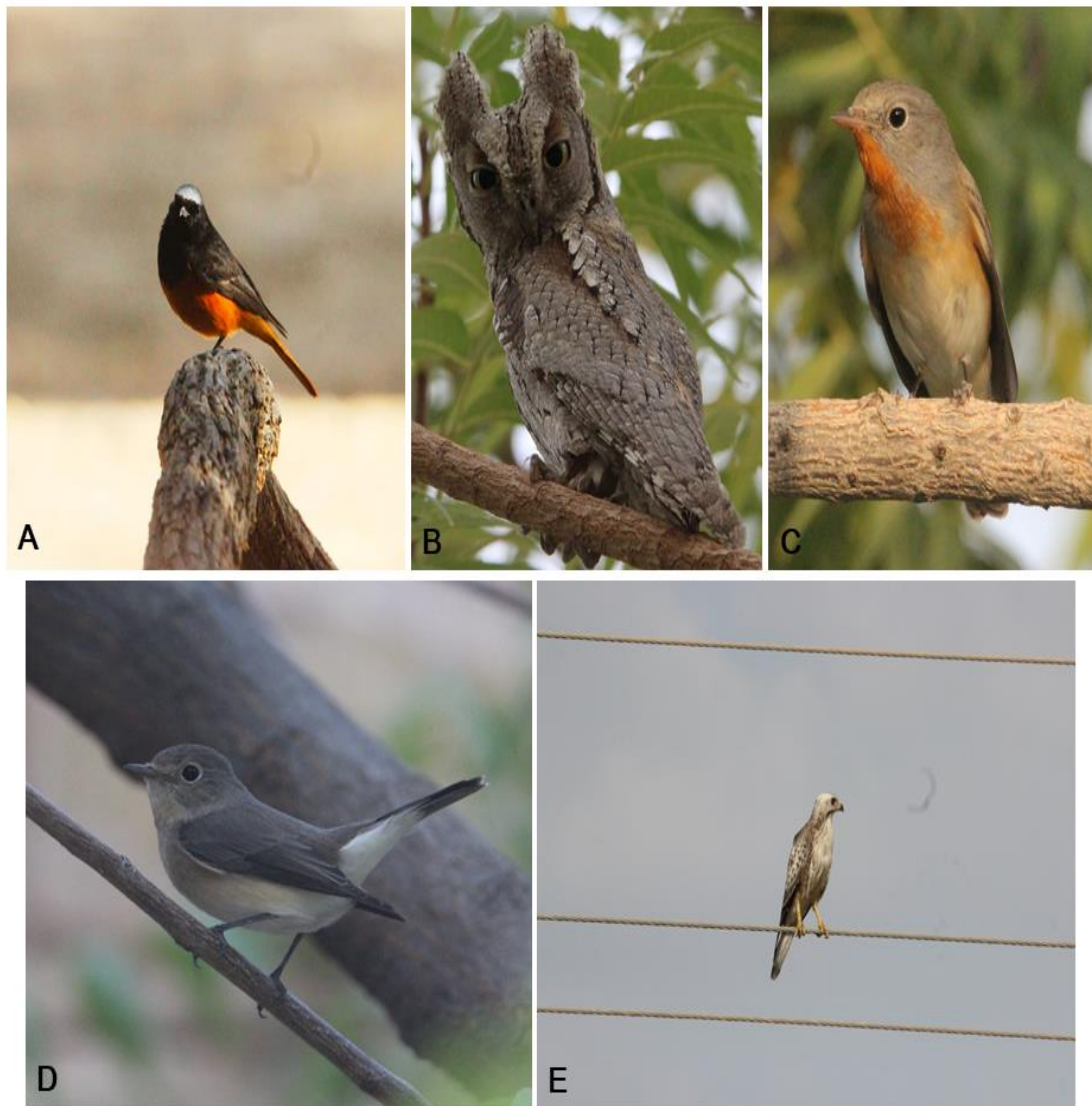


Fig.2. Migratory birds coming to thar desert of jaisalmer, rajasthan during winter

#### CONCLUSION

Jaisalmer district is very famous for tourism and different types of cultures practices. Most of the region of this district is found in Thar desert. In winter, there is very low temperature as because of sandy area. Here, the monsoon season is very fluctuating because sometime there is very high rainfall and sometime there is very low rain fall. This desert is known for the various types of rich flora and fauna. During the winter and monsoon many terrestrial migrating birds are come because of favourable conditions for feeding, shelter and reproduction.

#### Conflict of Interest

The authors declare that there is no conflict of interest.

**Author's Contributions**

All the authors are equally contributed. All authors have read and approved the final version of the manuscript.

**REFERENCES**

1. Souza AD (1983). Urban growth and urban planning: political context and people's priorities, Indian Social Institute
2. Linnaeus Ca (1758). *Systema Naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis* (in Latin). Vol. 1 (10<sup>th</sup> ed.). Holmiae (Stockholm): Laurentii Salvii. p. 107.
3. Svensson L, Mullarney K, Zetterstrom D (2009). Collins Bird Guide (2<sup>nd</sup> ed.). London: Harper Collins. p. 240. ISBN 978-0-00-726814-6.
4. Lepage, D, 2013. Rufous-tailed Scrub-Robin (*Cercotrichas galactotes*) (Temminck, 1820)". Avibase. Retrieved 2013-08-16.
5. Message S (2001) "The Turkestan Shrike in Kent" *Birding World* 14(10): 432–434
6. Worfolk T(2000) "Identification of red-backed, isabelline and brown shrikes" *Dutch\_Birding* 22(6): 323–362
7. Holling M (2010) Rare Breeding Birds Panel. "Rare breeding birds in the United Kingdom in 2008". *British Birds*. 103: 482–538.

**Figure legends**

**Figure 1.** Migratory birds coming to Thar desert of Jaisalmer, Rajasthan during monsoon season (A-F).

**Figure 2.** Migratory birds coming to Thar desert of Jaisalmer, Rajasthan during winter season (A-E).