

Dominant Avian Species of Village Danoda, district Jind, Haryana (India)

*Vikas, Ritu, Daya and Saddam Husain

Department of Zoology, Kurukshetra University, Kurukshetra -136119, Haryana (India)

*email: vikas17sikerwal@gmail.com

Abstract: During periodic weekly visits from June, 2015 to July, 2015, Scan sampling method (Altman, 1974) was followed to record avian fauna of village Danoda, district Jind, Haryana (India). In village Danoda, 20 species of birds, namely, *Acridotheres tritis*, *Corvus splendens*, *Dendrocitta vagabunda*, *Turdoides caudatus*, *Turdoides striatus*, *Phala crocorax niger*, *Phalacrocorax carbo*, *Ardeola grayii*, *Babulus ibis*, *Dendrocygna javanice*, *Anas clypeate*, *Haliaster indus*, *Povo cristatus*, *Columba livia*, *Prisyaculla krameri*, *Haycyon smyrnesis*, *Saxicola torquata*, *Passer domesticus*, *Acridotheres ginginianus* and *Pycnonotus cafer* were recorded. Order Passeriformes have maximum percentage of species, i.e, 45% were recorded.

[Vikas, Ritu, Daya and Saddam Husain. **Dominant Avian Species of Village Danoda, district Jind, Haryana (India)**. *Researcher* 2015;7(8):28-31]. (ISSN: 1553-9865). <http://www.sciencepub.net/researcher>. 6

Keywords: Biodiversity, Fauna, Village, Pond, Jind, Haryana.

1.1. Introduction

Biodiversity is the most fascinating aspect of biology. It refers to the variety and differences among living organisms. Biological diversity is one of the earth's natural resources. Biodiversity includes ecosystem development, soil maintenance, decomposition, self purification and climate regulation (Hosetti, 2002). Biodiversity plays important environmental and developmental role which are very crucial to human survival but are not according to economic value (Khan, 1998).

India is one of the 17 mega diversity nations in the world located in the tropics at the zone confluence of three major bio-geographic realms viz., the Indo-himalayan (South and South-East Asia), Palearctic (Europe and Northern Asia) and Afrotropical (Africa) realms. It has a rich geographical diversity and biological heritage comprising nearly 8100 vertebrate species including 340 species of mammals, 1250 species of birds, 420 species of reptiles and 142 species of amphibians (Saharia, 1998; Narang, 2000).

Biodiversity has been the subject of study of many researchers in different regions of Haryana, India (Whistler 1915, 1918; Yadav and Malyavar 1978, 1981; Gupta and Bajaj 1997; Kalsi, 1998; Bajaj, 2002; Tirshem, 2008; Garwa, 2008; Gupta and Kumar, 2009; Rai, 2011; Kumar, 2011; Kumar, 2011). Whistler (1915, 1918) studied the birds of Hisar and Ambala district Haryana. Afterward, Yadav and Malyavar (1978, 1981), Gupta and Bajaj (1997), Kalsi, (1998), Bajaj (2002), Tirshem (2008), Garwa (2008) and Gupta and Kumar (2009) have reported 203 species of birds in whole of Haryana, 23 wetland birds at Brahmarsarovar (Kurukshetra), 161 species from Kalesar wildlife sanctuary (Yamunanagar), 202 species of birds from four bird

sanctuaries, 80 wetland bird species from Northern Haryana, 87 species from Kurukshetra and 110 species of birds in and around Kurukshetra, respectively. Kumar (2014) also recorded 17 species of birds in Saraswati Plantation Wildlife Sanctuary. However, scanty information are available on different aspects of biodiversity in Haryana. Therefore, present research work was planned to record avian fauna of village Danoda, district Jind, Haryana (India).

1.2 Study area and Methodology:

Village Danoda (66° 31' E latitude and 39° 56' N longitude) is located in district Jind of Haryana was selected as study site (Fig. 1.1). It occupies an area of 10,218 acres (Fig. 1). The climate of area is subtropical, semi arid type and contain alkali soil. Annual rain fall in the area is 612 mm and average temperature is 33.4°C and vegetation of the village Danoda is categorized as "Sub-group 5B tropical deciduous forest".

During periodic weekly visits from June, 2015 to July, 2015, Scan sampling method (Altman, 1974) was followed to record avian fauna of village Danoda, district Jind, Haryana (India) (Fig. 1.1). Sighted avian species was identified followed by Ali, 2002; Garwa, 2008; Gupta and Kumar, 2008; and Kumar, 2014.

1.3. Results:

In village Danoda, 20 species of birds, namely, *Acridotheres tritis*, *Corvus splendens*, *Dendrocitta vagabunda*, *Turdoides caudatus*, *Turdoides striatus*, *Phala crocorax niger*, *Phalacrocorax carbo*, *Ardeola grayii*, *Babulus ibis*, *Dendrocygna javanice*, *Anas clypeate*, *Haliaster indus*, *Povo cristatus*, *Columba livia*, *Prisyaculla krameri*, *Haycyon smyrnesis*, *Saxicola torquata*, *Passer domesticus*, *Acridotheres*

ginginianus and *Pycnonotus cafer* were recorded (Table 1.1).

Order Passeriformes have maximum percentage of species, *i.e.*, 45% followed by Plecaniformes

(20%), Anseriformes (10%) and Falconiformes, Galliformes, Culumbiformes, Psittaciformes, Coraciformes is 5% each of respectively were recorded.

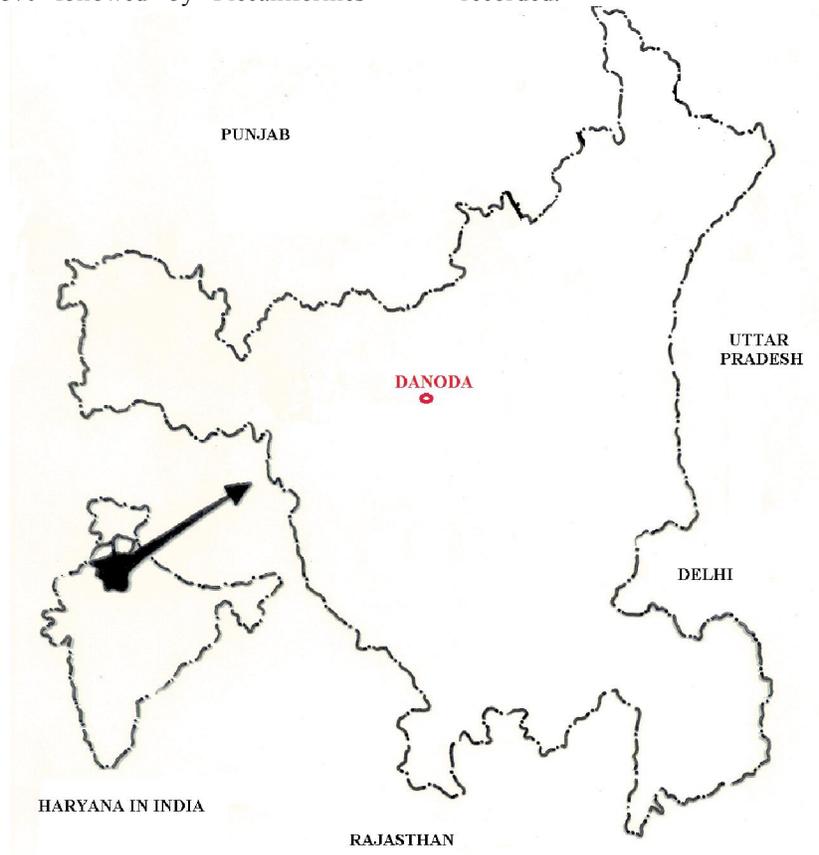


Fig. 1.1. Village Danoda, district Jind, Haryana (India).

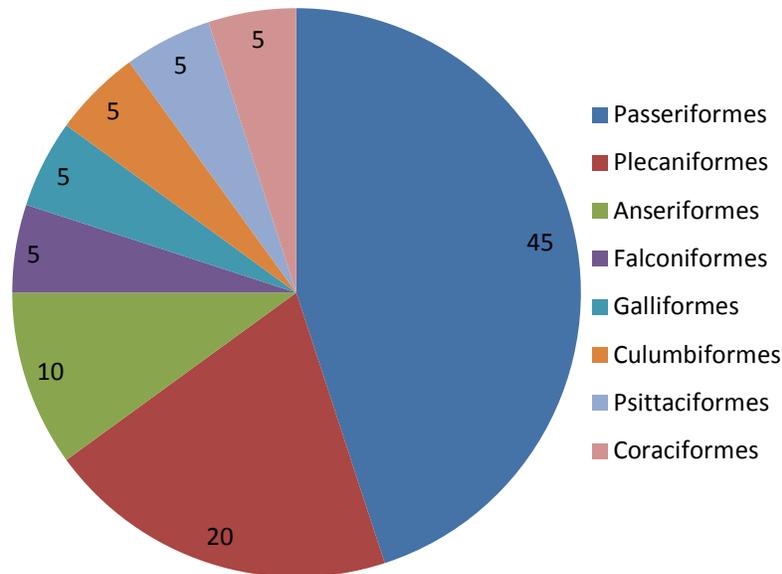


Fig. 1.2. Percentage wise distribution of order of prevalent avian fauna of village Danoda, district Jind, Haryana (India).

Table 1.1. Prevalent avian fauna of village Danoda, district Jind, Haryana (India).

No.	Avian species		
	Local name	Scientific name	Order
1	Common Myna	<i>Acridotheres tritis</i>	Passeriformes
2	Common crow	<i>Corvus splendens</i>	Passeriformes
3	Indian treepie	<i>Dendrocitta vagabunda</i>	Passeriformes
4	Common babbler	<i>Turdoides caudatus</i>	Passeriformes
5	Jungle babbler	<i>Turdoides striatus</i>	Passeriformes
6	Little cormorant	<i>Phala crocorax niger</i>	Plecaniformes
7	Great cormorant	<i>Phalacrocorax carbo</i>	Plecaniformes
8	Indian pond heron	<i>Ardeola grayii</i>	Plecaniformes
9	Cattle egret	<i>Babulus ibis</i>	Plecaniformes
10	Lesser whistlingduck	<i>Dendrocygna javanic</i>	Anseriformes
11	Northern shoveller	<i>Anas clypeate</i>	Anseriformes
12	Brahmini kite	<i>Haliaster Indus</i>	Falconiformes
13	Indian pea fowl	<i>Povo cristatus</i>	Galliformes
14	Blue rock pigeon	<i>Columba livia</i>	Culumbiformes
15	Rose ringed parakeet	<i>Pristaculla krameri</i>	Psittaciformes
16	White bristled kingfisher	<i>Haycyon smyrnesis</i>	Coraciformes
17	Common stone chite	<i>Saxicola torquata</i>	Passeriformes
18	House sparrow	<i>Passer domesticus</i>	Passeriformes
19	Bank Myna	<i>Acridotheres ginginianus</i>	Passeriformes
20	Red Vented Bulbul	<i>Pycnonotus cafer</i>	Passeriformes

1.4. Discussion:

According to Hosetti and Caplon (2001) and Animal Web Diversity (2012), the country is estimated to have over 45000 plants species and 81000 animal species representing 7% and 6.5% of the world flora and fauna respectively. Aggarwal (2002), however, has reported about 2546 species of fishes, 204 species of amphibians, 446 species of reptiles, 1228 species of birds and 372 species of mammals in India. Newton *et al.* (1986), Tyabji (1994) and Bhatt and Sharma (2000) recorded a total number of 154 avian species belonged to 17 orders of 53 families in Khanha Tiger Reserve, Madhya Pradesh; 161 avian species belonged to 18 orders of 53 families and 70 avian species belonging to 30 families of 14 orders in Rajaji National Park Uttarakhand, respectively. Similarly, Allen (2002) reported 107 avian species including five threatened species, *viz.*, Greater Adjutant, Ferruginous Pochard, Jerdon's Babbler, Black-breasted, Parrot Bill and Marsh Babbler in Dibru saikhowa Biosphere Reserve (Assam). Also, Urfi (2003) reported 302 avian species including three vulnerable species (Baer's Pochard, Indian Skimmer and Bristled Grassbird) and six near threatened species (Ferruginous Pochard, Black-bellied Tern, Darter, Black-headed Ibis, Painted Stork and Black-necked Stork in protected area of Delhi (Okhla Barrage Bird Sanctuary).

Earlier coworkers likes Whistler (1918) studied the birds of Hisar and Ambala district Haryana. Afterward, Yadav and Malyavar (1978, 1981), Gupta

and Bajaj (1997), Kalsi, (1998), Bajaj (2002), Tirshem (2008), Garwa (2008) and Gupta and Kumar (2009) have reported 203 species of birds in whole of Haryana, 23 wetland birds at Brahmarsarovar (Kurukshetra), 161 species from Kalesar wildlife sanctuary (Yamunanagar), 202 species of birds from four bird sanctuaries, 80 wetland bird species from Northern Haryana, 87 species from Kurukshetra and 110 species of birds in and around Kurukshetra respectively.

In village Danoda, 20 species of birds, namely, *Acridotheres tritis*, *Corvus splendens*, *Dendrocitta vagabunda*, *Turdoides caudatus*, *Turdoides striatus*, *Phala crocorax niger*, *Phalacrocorax carbo*, *Ardeola grayii*, *Babulus ibis*, *Dendrocygna javanice*, *Anas clypeate*, *Haliaster indus*, *Povo cristatus*, *Columba livia*, *Prisyaculla krameri*, *Haycyon smyrnesis*, *Saxicola torquata*, *Passer domesticus*, *Acridotheres ginginianus* and *Pycnonotus cafer* were recorded.

Chopra *et al.* (2014) 149 avian species belonging to 40 families of 15 orders, namely, Podicipediformes, Pelecaniformes, Ciconiiformes, Anseriformes, Falconiformes, Galliformes, Gruiformes, Charadriiformes, Columbiformes, Psittaciformes, Cuculiformes, Strigiformes, Apodiformes, Coraciiformes and Passeriformes (maximum 62 species) in Sultanpur National Park. Kumar (2014) recorded maximum percentage of avian species in order Passeriformes (35%) then in Plecaniformes (23%), Anseriformes (12%) followed by 6% in each of Falconiformes, Galliformes,

Culumbiformes, Psittaciformes and Coraciformes in Saraswati Plantation Wildlife Sanctuary and maximum percentage of avian species in order Passeriformes (35%) then 13% in each of Plecaniformes and Anseriformes followed by 7% in each of Galliformes, Culumbiformes, Psittaciformes, Coraciformes and least of 6% in order Falconiformes were recorded in Bir Sonty Reserve Forest. Similarly, in the present study Order Passeriformes have maximum percentage of species, *i.e.* 45% followed by Plecaniformes (20%), Anseriformes (10%) and Falconiformes, Galliformes, Culumbiformes, Psittaciformes, Coraciformes is 5% each of respectively were recorded in village Danoda, district Jind, Haryana (India).

Correspondence address:

*Vikas

Department of Zoology,
Kurukshetra University,
Kurukshetra -136119, Haryana (India)

*email: vikas17sikerwal@gmail.com

Contact No. +91-9896070717

References:

1. Aggarwal, M. (2002) Selection of avian prey by wintering sparrow hawks, *Accipiter nisus* in Southern Scotland, *Ardea* 83:381-389.
2. Ali, S. (2002) The book of Indian birds, *Oxford University Press*, Mumbai 3(11):118.
3. Allen, D. (2002). A bird survey of the Amarpur area of the Dibru-Saikhowa Biosphere Reserve, Assam, India, *Forktail*, 18: 87-91.
4. Altman, J. (1974): Observation study of behavior: sampling methods. *Behaviour*. 49:227-265.
5. Animal Diversity Web (2012) Birdnet Bird Account.
6. Bajaj, M. (2002): Studies on the Avian Fauna of Bird Sanctuaries, Ph.D. Thesis, Department of Zoology, Kurukshetra University Kurukshetra, Haryana (India).
7. Baker, E.C.S. (1935) The nidification of birds of the Indian empire 3 vol. Taylor and Francis London.
8. Bhatt, D. and Sharma, R. (2000). Diversity, status and feeding ecology avifauna in Motichur area of Rajaji National Park, India, 8(2): 179-191.
9. Chopra, G., Tyor, A.K. and Kumari, S. (2014). Ph.D. thesis on A Study on Avian biodiversity of Sultanpur National Park, Haryana (India). Department of Zoology, Kurukshetra University, Kurukshetra, Haryana (India).
10. Dagar J.C., Singh G, Singh NT. (2001) Evaluation of forest and fruit tree used for rehabilitation of semiarid alkali-sodic soil. *India Journal of Arid land Research and Management*, 15(2):115-133.
11. Garwa, R. (2008): Study on Avian biodiversity of District Kurukshetra Suburbs, Haryana, India, M.Phil. Dissertation, Kurukshetra University, Kurukshetra.
12. Gupta, R. C. and Kumar, S. (2009): Determination of avian bio diversity in Morni hills in district Panchkula, Haryana, *J. Adv. Zool.*, 30 (1): 44-53.
13. Gupta, R. C. and Bajaj, M. (1997): Preliminary investigations into migratory wetland birds of Brahma Sarovar at Kurukshetra, *Jeevanti*, 15: 29-41.
14. Hosetti, V.V. and Calpan, J.R. (2001) Daily patterns of energy storage in food caching birds under variable daily predation risk: a dynamic state variable model, *Behav Ecol. Sociobiol* 50:239-250.
15. Huxley, C. (1868) Birds of Ranthumbhore national park, Rajasthan, *J. Bombay Nat.Hist. Soc.* 38(3):121-127.
16. Kalsi, R. S. (1998): Birds of Kalesar Wild Life Sanctuary, Haryana (India), *Forktail*, 13: 29-32.
17. Kumar, A. (2014): Avian Species of Saraswati Plantation Wildlife Sanctuary and Bir Sonty Reserve Forest in district Kurukshetra, Haryana (India) *International Journal of Fauna and Biological Studies*. 1 (6): 38-41.
18. Myres, P.N. (1999) The atlas of Australian birds, *Melbourne University Press*, Melbourne.
19. Narang, M.L. (2000) Wildlife, in, Verma, L.R. (Eds.), nature resource and development in Himalaya, *Malhotra Publishing House*, New Delhi 103(2-3):11-13.
20. Sihag, R.C. (1991) Ecology of European honey bee (*Apis mellifera*) in semi arid and subtropical climates II: seasonal incidence of diseases, pests, predators and enemies, *Korean J. Apicul.* 6:16-26.
21. Tirshem, (2008): Study of Wetland Avifauna of Seven Districts of Haryana, Ph.D Thesis, Kurukshetra University, Kurukshetra.
22. Urfi, A.J. (2003). The birds of Okhla Barrage bird Sanctuary, Delhi, India, *Forktail*, 19: 39-50.
23. Whistler, H. (1918): Notes on the birds of Ambala District, Punjab Part II, *J. Bombay Nat. Hist. Soc.*, 26(1): 665-681.
24. Yadav, J.S. and Maleywar, R.P. (1981): The birds of Haryana, A few more spotting, *Pavo* 19: 51-55.