

Avian Diversity in Mizoram University Campus, Aizawl, Mizoram

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Abstract—We conducted an avian survey to assess the avian diversity of Mizoram University campus, Aizawl for a period of 24 months. During the study a total of 3,555 no of individuals of 189 species of birds belonging to 43 families were recorded. The family Muscicapidae represented the highest species composition with 28 species followed by family Timaliidae and Cuculidae with 19 and 13 species respectively. Avian profile of university campus, 1419(74.5%) are known to be resident of MZU campus and its adjacent area, 31 (16.4%) species are winter visitors, 15 (7.9%) species are summer visitor, and two species namely, Hooded pitta (*Pitta sordid*) and Forest wagtail (*Dendronanthus indicus*) are passer migrants. The variation in avian species recorded in university campus across the seasons is significant ($P<0.05$), variation between the seasons was also significant ($P<0.01$). University campus exhibited high avian diversity. Shannon Wiener diversity index (H') value calculated was 3.286 and species evenness index was 0.62. The detailed of avian fauna of campus recoded and the need of conservation actions are discussed in length.

INTRODUCTION

Mizoram falls within the northeast bio-geographical zone and is a part of Indo-Mynmar biodiversity hotspot; encompasses rich biodiversity. Several factors and variability within habitat such as topographical, climatic, and forest category have contributed to avian species diversity and richness. Wilderness species in Mizoram has been reported to have a very wide taxonomic range, with respect to the enormous diversity of ecosystem and geographical conditions. However, in the last few decades, human activities and infrastructure developmental projects are the primary factors liable for reduction of biodiversity and also resulted in reduced carrying capacity of the environment (Gaston *et al.*, 2003). Human induced disturbances are causing subtle to major landscape changes. Rapid deforestation of tropical forest and large scale human disturbances has increased concern about their effect on vegetation structure and composition, and animal communities in general (Schutle and Niemi, 1998).

Birds are more sensitive to such changes and are considered good predictors of habitat quality, as they relate to changes in their associated habitat in numerous ways

(Shankar Raman *et al.* 1998, Chettri *et al.* 2001, Shankar Raman, 2011) because they respond to habitat structure (MacArthur and MacArthur, 1961) and represent several trophic groups or guilds (Steele *et al.* 1984). Mizoram has a great variety of wild flora and fauna due to its location within Indo-Myanmar Hotspot region. Bird community plays an important role in forest ecosystem. Although population studies can be used for monitoring the long term change in the ecosystem (Weins, 1989), knowledge of the diversity of bird in a particular area is important for determining the health of the ecosystem. The requirement for bird's habitat is food, water, space and cover (US Fish and Wildlife Service (2002). So, the study of the avian community of a particular habitat can be a determinant of the health of that habitat. Mizoram University campus is lush green campus with high biological diversity. Since campus is relatively new and vibrant due to various infrastructural and anthropogenic activities. Landscape and natural forest transformation is undergoing rapidly that is affecting natural fauna. A study was undertaken to develop a profile and assess avian community on the campus that will give a baseline data for further studies on monitoring and evaluation of avian fauna when university campus will grow further and witness more such activities.

MATERIALS AND METHOD

STUDY AREA

Study was carried out inside the Mizoram University (MZU) campus, 15 Km away from Aizawl town. Mizoram University campus encompasses roughly 980 acres of land area and geographically located between 23° 73' 94" N and 92° 66' 51" E elevation ranges from 300 m to 880 m above mean sea level. Number of streams flows through the campus namely Setlak lui, Rultawi lui, Hradawng lui, Lalmangkawng lui, Lungsumazau lui, Kel lui and Chengkawng lui flows through campus and joins the main Tlawng river (Zothanpui, 2019). The vegetation type is mainly tropical wet evergreen to semi evergreen including a protected forest and a small biodiversity park. The area was covered with lush green vegetation with mostly evergreen trees of 384 species of vascular plants which belongs to 290 genera and 107 families (Lalchhuanawma, 2008) interspersed with tall grass.

The bird survey was conducted inside the University campus and its adjacent forest by walking the forested path. Opportunistic sampling was also considered to strengthen the species composition. The survey path were walked mostly in the morning (0500–0830hrs) and evening (1400–1700hrs) for 24 months during 2017 and 2018. Frequency of observing birds was maintained one day per week and four days in a month. For each survey, DSLR Camera (Nikon D5100 and Canon 760D) was used for photography and binocular (Nikon Aculon15x50) was used for observation and identification of birds, For identification of birds, colored plates of Grimmett *et al.* (2013) were used. A book on Popular Birds of Mizoram (Lalthanzara and Kasambe, 2015) was referred for local name of birds. Variation in avian diversity across the seasons was tested by Analysis of Variance (ANOVA) and comparison of diversity between the seasons was tested by student's 't' test using SPSS ver. 17. Shannon Weaver's diversity and Simpson evenness index was calculated as per Mugurran (1985).

OBSERVATIONS AND DISCUSSION

Mizoram lies at the Indo-Myanmar Biodiversity hotspot, a biodiversity rich area, however the works on avian community is very scanty. Lepage (2018) recorded 652 species of bird from this hilly state of Mizoram including 26 globally threatened species. Choudhury (2008) listed

479 species with an additional 140 uncertain species from Mizoram. The Zoological Survey of India (2007) recorded 370 species and 317 species by BNHS-ENVIS. The MZU campus is observed an abode for total of 189 species of birds belonging to 43 families (Table 1). The family Muscicapidae has the highest species composition with 28 species recorded inside the campus followed by family Timaliidae and Cuculidae with 19 and 13 species respectively. The families-Zosteropidae, Fringilidae, Rhipiduridae, Aegithinidae, Artamidae, Pittidae, Eurylaimidae, Coraciidae, Podargidae, Caprimulgidae, Upupidae, Rallidae, and Turnicidae has a single species representative (Fig. 1).

The high species composition of the family Muscicapidae is recorded, it might be due to the higher adaptability of members of the family in areas of various anthropogenic disturbances and tolerant of various threats. Their habits of foraging in the top canopy, open shrub and near human settlements are also believed to increase the species count in the present study. It may be also due to the diverse habitat occupied by various species under the family Muscicapidae which allows the species to thrive well and survive under the dynamic ecosystem in MZU campus with ongoing diverse anthropogenic activities.

A total of 3,555 no of individuals of bird belonging to 189 different species recorded during total observation period indicate high degree of avian diversity that is also reflected in Shannon Wiener diversity index (H) of 3.287. There thirteen families which are represented by single species is another indicator of species diversity. Distribution of species evenness was high with 0.62. This high diversity of bird species in a roughly 980 acres of land was remarkably high. The result of evenness clearly depicts the occurrence of individuals of different species which in turn indicates the suitability of the habitat for a great variety of bird species. 141 species were identified as resident, 31 species were winter visitors (table 2), 15 were summer visitor (table 3), and two species were recorded as passer migrants, Hooded pitta (*Pitta sordid*) and Forest wagtail (*Dendronanthus indicus*) (table 4). A photoplate of some birds is also enclosed. Variation of avian species across the seasons was found to be significant ($P < 0.05$) and species recorded between seasons was compared and also found significant ($P < 0.01$). The present record of 189 species at MZU campus is more than the record elsewhere in similar habitat. Chakdar *et al.* (2016) recorded 73 species of birds in the Assam University Campus of Silchar, Assam. Dey *et al.* (2013) recorded 76 species of birds from 234 acre campus

area of Maharaja Bir Bikram College, Agartala, Tripura. Mizoram University is a potential habitat for avian diversity in comparison to other such organizations in this region.

In Dampa Tiger Reserve (DTR), 215 species of birds was claimed to be present by the official website of Environment, Forest and Climate Change Department, Government of Mizoram. The renowned Murlen National Park (MNP) is known to be haven for more than 150 species of birds while Lalawmawia and Lalthanzara (2015) recorded 146 species of birds from Lengteng Wildlife Sanctuary. Meanwhile, Vanlalsawmi *et al.* (2011) also reported 54 species of birds only from DTR in a short study period. The avian species diversity of MZU campus is higher than the Phawngpui National Park (PNP) where 108 species are recorded by Ghose (1999). However inter species and inter generic variations may be higher in Phawngpui national Park being a protected area.

Among the recorded avian species, 75% are resident of MZU campus and its adjacent area and 25% of birds are visitors (Fig. 2). The grassy patch which interspersed the evergreen forest traversed by the wet and dried streams provide safe haven for these large congregation of diverse avian species. High percentage of resident species clearly depicts the richness of MZU campus in terms of avian diversity make this area very important for conservation and rehabilitation of birds. The authors encounter with some local hunters inside the MZU campus that is distressing for birds, and need immediate intervention of the University authorities. In view of the high number of resident species as well as seasonal visitors, the campus area needs to be well preserved and protected from the onslaught of external and internal threats which are deleterious to the wildlife and their habitat.

Table 1: Check List of Birds Recorded on Mizoram University Campus

Family	English Name	Scientific Name	Local Name(Mizo)
Phasianidae	Red Jungle Fowl	<i>Gallus gallus</i>	Ram-ar
	Kalij Pheasant	<i>Lophura leucomelanos</i>	Vahrit
	Mountain Bamboo Partridge	<i>Bambusicola fytchii</i>	Vahlah
Turnicidae	Barred Button Quail	<i>Turnix suscitator</i>	Vahmim
Falconidae	Amur Falcon	<i>Falco amurensis</i>	Sialsir
	Common Kestrel	<i>Falco tinnunculus</i>	Mu te
Accipitridae	Crested Serpent Eagle	<i>Spilornis cheela</i>	Muvanlai
	Oriental Honey Buzzard	<i>Pernis ptilorynchus</i>	Khuaimu
	Crested Goshawk	<i>Accipiter trivirgatus</i>	Muningaldang
	Shikra	<i>Accipiter badius</i>	Mute
	Japanese Sparrowhawk	<i>Accipiter gularis</i>	Mute
	Besra	<i>Accipiter virgatus</i>	Mute
	Rufous-bellied Eagle	<i>Lophotriorchis kienerii</i>	Mu-ar la
	Common Buzzard	<i>Buteo buteo</i>	Munibuang
	Black Baza	<i>Aviceda leuphotes</i>	Mu kelrang

Table 1 (Contd.)...

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...Table 1 (Contd.)

Family	English Name	Scientific Name	Local Name(Mizo)
Rallidae	Slaty-legged Crake	<i>Rallina eurizonoides</i>	Kang-kang
Culumbidae	Pin-tailed Green Pigeon	<i>Treron apicauda</i>	Huipui
	Orange-breasted Green Pigeon	<i>Treron bicinctus</i>	Vahui
	Wedge-tailed Green Pigeon	<i>Treron sphenurus</i>	Vahui
	Barred Cuckoo Dove	<i>Macropygia unchall</i>	Thumimeisei
	Emerald Dove	<i>Chalcophaps indica</i>	Ramparva
	Spotted Dove	<i>Stigmatopelia chinensis</i>	Thuro
	Oriental Turtle Dove	<i>Streptopelia orientalis</i>	Thumi
	Thick-billed Green Pigeon	<i>Treron curvirostra</i>	Huifek
Psittacidae	Red-breasted Parakeet	<i>Psittacula alexandri</i>	Kiteng
	Vernal Hanging Parrot	<i>Loriculus vernalis</i>	Run vaki/Vaki te
Strigidae	Himalayan Wood Owl	<i>Strix leptogrammica</i>	Chingpirinu
	Collared Owlet	<i>Glaucidium brodiei</i>	Hrangkir
	Collared Scops Owl	<i>Otus lettia</i>	Chhimbuk
	Oriental Scops Owl	<i>Otus sunia</i>	Chhimbuk
	Asian-barred Owlet	<i>Glaucidium cuculoides</i>	Chhimbuk te
	Spot-bellied Eagle Owl	<i>Bubo nipalensis</i>	Chhimbukpui
Cuculidae	Greater Coucal	<i>Centropus sinensis</i>	Lalruangasehnawt
	Lesser Coucal	<i>Centropus bengalensis</i>	Lalruangasehnawt
	Green-billed Malkoha	<i>Rhopodytes tristis</i>	Vazun/va uk
	Large Hawk Cuckoo	<i>Hierococcyx sparverioides</i>	Kiltheihrawk
	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	Kiltheihrawk
	Asian Koel	<i>Eudynamys scolopaceus</i>	Mitthi ar
	Jacobin Cuckoo	<i>Clamator jacobinus</i>	
	Chestnut-winged cuckoo	<i>Clamator coromandus</i>	

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Family	English Name	Scientific Name	Local Name(Mizo)
	Banded Bay Cuckoo	<i>Cacomantis sonneratii</i>	Thangfenpabawp
	Asian Emerald Cuckoo	<i>Chrysococcyx maculatus</i>	
	Lesser Cuckoo	<i>Cuculus poliocephalus</i>	Thangfenpabawp te zawk
	Hodgson's Hawk Cuckoo	<i>Hierococcyx nasicolor</i>	Kiltheihrawk
	Violet Cuckoo	<i>Chrysococcyx xanthorhynchus</i>	Mawntaipirtliak
Meropidae	Blue-bearded Bee-eater	<i>Nyctyornis athertoni</i>	Tlakawrh
	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	Fuanhawr
Upupidae	Common Hoopoe	<i>Upupa epops</i>	Chhuangtuar/Vaseek
Ramphastidae	Blue-throated Barbet	<i>Megalaima asiatica</i>	Tukloh
	Great Barbet	<i>Megalaima virens</i>	Tawllawt
Picidae	Greater Yellownape	<i>Picus flavinucha</i>	Thlohlpur
	Lesser Yellownape	<i>Picus chlorolophus</i>	Thlohlpur
	White-browed Piculet	<i>Sasia ochraceae</i>	Luangtubeuh
	Speckled Piculet	<i>Picumnus innominatus</i>	Luangtubeuh
	Grey-capped Pygmy Woodpecker	<i>Dendrocopos canicapillus</i>	Thlohte
	Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i>	Thlohte
	Bay Woodpecker	<i>Blythipicus pyrrhotis</i>	Mauthloh
	Rufous Woodpecker	<i>Micropternus brachyurus</i>	Fanghmir thloh
	Eurasian Wryneck	<i>Jynx torquilla</i>	Valeisei
	Grey-headed Woodpecker	<i>Picus canus</i>	Thloh hring
Hirundinidae	Nepal House Martin	<i>Delichon nipalense</i>	Vamurte
	Asian Palm Swift	<i>Cypsiurus balasiensis</i>	Vamur
	Brown -backed Needletail	<i>Hirundapus giganteus</i>	Murpui
	Fork-tailed Swift	<i>Apus pacificus</i>	Murpui
	Striated Swallow	<i>Cecropis striolata</i>	Vamur Ngumsen

Table 1 (Contd.)...

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...Table 1 (Contd.)

Family	English Name	Scientific Name	Local Name(Mizo)
Motacillidae	Grey Wagtail	<i>Motacilla cinerea</i>	Lailen
	White Wagtail	<i>Motacilla alba</i>	Lailen var
	Tree Pipit	<i>Anthus triavilis</i>	Chip
	Forest Wagtail	<i>Dendronanthus indicus</i>	Sehnungzui/Ngawkar Lailen
Campephagidae	Scarlet Minivet	<i>Pericrocotus speciosus</i>	Bawng
	Long-tailed Minivet	<i>Pericrocotus ethologus</i>	Bawng
	Ashy Minivet	<i>Pericrocotus divaricatus</i>	Bawngte
	Large Woodshrike	<i>Tephrodornis gularis</i>	Thlekbur
	Large Cuckooshrike	<i>Coracina macei</i>	Irliak
	Black-winged Cuckooshrike	<i>Coracina melaschistos</i>	Changde
Pycnonotidae	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Tlaiberh
	Red-whiskered Bulbul	<i>Pycnonotus jacosus</i>	Thlangvaberh/Phaitlaiberh
	Black-crested Bulbul	<i>Pycnonotus flaviventris</i>	Tukkhumvilik
	White-throated Bulbul	<i>Alphoiphoxus flaveolus</i>	Dawkek
	Ashy Bulbul	<i>Hemixos flava</i>	Kawlrut
	Flavescent Bulbul	<i>Pycnonotus flavescens</i>	Setawt
	Black Bulbul	<i>Hypsipetes leucocephalus</i>	Hmuisen/Kesen/Liandorit
Caprimulgidae	Grey Nightjar	<i>Caprimulgus jotaka</i>	Valambawk
Podargidae	Hodgson's Frogmouth	<i>Batrachostomus hodgsoni</i>	Valambawk/Vabak
Coraciidae	Indian Roller	<i>Coracias benghalensis</i>	Vapui
Eurylaimidae	Long-tailed Broadbill	<i>Psarisomus dalhousiae</i>	Thizil
Pittidae	Hooded Pitta	<i>Pitta sordida</i>	Buarchawm lu uk
Artamidae	Ashy Wood swallow	<i>Artamus fuscus</i>	Lengder
Aegithinidae	Common iora	<i>Aegithina tiphia</i>	Zairumva
Laniidae	Long-tailed Shrike	<i>Lanius scach</i>	Chhemhur
Halcyonidae	Brown Shrike	<i>Lanius cristatus</i>	Chhemhur uk

Table 1 (Contd.)...

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Family	English Name	Scientific Name	Local Name(Mizo)
	Burmese Shrike	<i>Lanius colluriooides</i>	Chhemhur sen uk
	Grey-backed Shrike	<i>Lanius tephronotus</i>	Chhemhur(vut buak)
	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	Kaikuangral
	Black-capped Kingfisher	<i>Halcyon pileata</i>	Kaikuangral ludum
Dicruridae	Bronzed Drongo	<i>Dicrurus aeneus</i>	Changkak
	Ashy Drongo	<i>Dicrurus leucophaeus</i>	Thlanthla
	Lesser Racket-tailed Drongo	<i>Dicrurus remifer</i>	Thlanthla changhlawi
	Greater Racket-tailed Drongo	<i>Dicrurus paradiseus</i>	Vakul changhlawi
	Hair-crested Drongo	<i>Dicrurus hottentottus</i>	Kulherh
Oriolidae	Slender-billed Oriole	<i>Oriolus tenuirostris</i>	Vamaitai
	Black-naped Oriole	<i>Oriolus chinensis</i>	Vamaitai
	Maroon Oriole	<i>Oriolus trailii</i>	Changsen
Rhipiduridae	White-throated Fantail	<i>Rhipidura albicollis</i>	Changarh
Monarchidae	Black-naped Monarch	<i>Hypothymis azurea</i>	Zumzek/Thangthlengral
	Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i>	Thlehnniar
Corvidae	Eastern Jungle Crow	<i>Corvus macrorhynchus</i>	Choak
	Common Green Magpie	<i>Cissa chinensis</i>	Dawntliang
	Rufous Treepie	<i>Dendrocitta vagabunda</i>	Bemkawng
	Grey Treepie	<i>Dendrocitta formosae</i>	Bemkawng
Cisticolidae	Common Tailorbird	<i>Orthotomus sutorius</i>	Daikat/hnahkhawr
	Plain Prinia	<i>Prinia inornata</i>	Zirziak
	Striated Prinia	<i>Prinia crinigera</i>	Changdawt
	Black-throated Prinia	<i>Prinia atrogularis</i>	Changdawt awr dum
	Rufescent Prinia	<i>Prinia rufescens</i>	Zirziak
Sylviidae	Yellow-browed Leaf Warbler	<i>Phylloscopus inornatus</i>	Chivit/Saivate/Chilim/ Chhawlhchhah

Table 1 (Contd.)...

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Family	English Name	Scientific Name	Local Name(Mizo)
	Grey-crowned Warbler	<i>Seicercus burkii</i>	Chivit/Saivate/Chilim/ Chhawlchhaih
	Yellow-vented Warbler	<i>Phylloscopus cantator</i>	Chivit/Saivate/Chilim/ Chhawlchhaih
	Thick-billed Warbler	<i>Phragamaticola aedon</i>	Hmunchhe arpuilian
	Common Stonechat	<i>Saxicola torquatus</i>	Tep
	Grey Bushchat	<i>Saxicola ferreus</i>	Terzik
Timaliidae	Puff-throated Babbler	<i>Pellorneum ruficeps</i>	Valeisawt
	Rufous-capped Babbler	<i>Stachyridopsis ruficeps</i>	Vate lusen
	Pin-striped Tit Babbler	<i>Macronous gularis</i>	
	Chestnut-capped Babbler	<i>Timalia pileata</i>	Vatelusen
	Rufous-fronted Babbler	<i>Stachyridopsis rufifrons</i>	Vatelusen
	Grey-throated Babbler	<i>Stachyris nigriceps</i>	Vatekawngkan
	Spot-breasted Scimitar Babbler	<i>Pomatorhinus erythrocnemis</i>	Ngalvapual awmtial
	Coral-billed Scimitar Babbler	<i>Pomatorhinus ferruginosus</i>	Ngalvapual
	White-crested Laughingthrush	<i>Garrulax leucolophus</i>	Koro
	Greater-necklaced Laughingthrush	<i>Garrulax pectoralis</i>	Vazar/Zarpuithiawrh
	Lesser-necklaced Laughingthrush	<i>Garrulax monileger</i>	Vazar/Zarfek
	Rufous-necked Laughingthrush	<i>Garrulax ruficollis</i>	Vachawm
	White-browed Shrike Babbler	<i>Pteruthius flaviscapis</i>	Kawl vasir
	Brown-cheeked Fulvetta	<i>Alcippe poiocephala</i>	Mau va
	Nepal Fulvetta	<i>Alcippe nipalensis</i>	Ngawkar mitval
	Yellow-eyed Babbler	<i>Chrysomma sinense</i>	
	Striated Yuhina	<i>Staphida castaniceps</i>	Tehhek
	White-bellied Erpornis	<i>Erpornis zantholeuca</i>	Vate lungleng
	Greater Rufous-headed Parrotbill	<i>Psittiparus ruficeps</i>	Vahnanghlai chikhat

Table 1 (Contd.)...

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Family	English Name	Scientific Name	Local Name(Mizo)
Muscicapidae	White-capped Redstart	<i>Chaimarrornis leucocephalus</i>	Vachalde
	Rufous-gorgeted Flycatcher	<i>Ficedula strophciata</i>	Terzik nghawngsen
	Little Pied Flycatcher		Ter pa
	Verditer Flycatcher	<i>Eumyias thalassinus</i>	Vapawl
	Taiga Flycatcher	<i>ficedula albicilla</i>	Ter
	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	Thangfenpabawp
	Orange-headed Thrush	<i>Zoothera citrina</i>	Vakhuang
	Scaly Thrush	<i>Zoothera dauma</i>	Ram chippui
	Grey-sided Thrush	<i>Turdus faea</i>	Tiau
	Blue Rock Thrush	<i>Monticola solitarius</i>	Va-in-ro nghak
	Long-billed Thrush	<i>Zoothera monticola</i>	Ramchippui hmusei
	Dark-sided Thrush	<i>Zoothera marginata</i>	Ramchippui
	Siberian Rubythroat	<i>Luscinia calliope</i>	Tawktawk awrsen
	White-tailed Rubythroat	<i>Luscinia pectoralis</i>	Tawktawk awrsen(a chang var)
	Himalayan Bluetail	<i>Tarsiger rufilatus</i>	
	Oriental Magpie Robin	<i>Copsychus saularis</i>	Khawmual chinrang
	White-rumped Shama	<i>Copsychus malabaricus</i>	Vatelal
	Black Redstart	<i>Phoenicurus ochruros</i>	
	Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	
	Black-backed Forktail	<i>Enicurus immaculatus</i>	Chinrang
	Spotted Forktail	<i>Enicuruc maculatus</i>	Chinrang
	White-tailed Robin	<i>Myiomela leucura</i>	Pi-tuibur-kei-ve/Pi tuibur dil
	Dark-sided Flycatcher	<i>Muscicapa sibirica</i>	Ter
	Asian Brown Flycatcher	<i>Muscicapa dauurica</i>	Ter uk

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Family	English Name	Scientific Name	Local Name(Mizo)
	Vivid Niltava	<i>Niltava vivida</i>	Be-ai-ral
	Blue-throated Blue Flycatcher	<i>Cyornis rubiculoides</i>	Vadumdeleng
	Small Niltava	<i>Niltava macgrigoriae</i>	Be-ai-ral te zawk
	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	Mauhmun vate
Nectarinidae	Crimson Sunbird	<i>Aethopyga siparaja</i>	Dawithiama arpa
	Mrs Goulds Sunbird	<i>Aethopyga gouldiae</i>	Dawithiama arpa
	Ruby-cheeked Sunbird	<i>Chalcoparia singalensis</i>	Dawithiama arpa
	Little Spiderhunter	<i>Arachnothera longirostra</i>	Kireuh te/Tumbu ar/Zetzet/ Lawizit
	Streaked Spiderhunter	<i>Arachnothera magna</i>	Kireuh
	Plain Flowerpecker	<i>Dicaeum minullum</i>	Tiktik
	Yellow-vented Flowerpecker	<i>Dicaeum chrysorrheum</i>	Tiktik awmtial
	Scarlet-backed Flowerpecker	<i>Dicaeum cruentatum</i>	Tek tek
Chloropseidae	Orange-bellied Leafbird	<i>Chloropsis hardwickii</i>	Chhawlhring awm eng
	Golden-fronted Leafbird	<i>Chloropsis aurifrons</i>	Chhawlhring lu sen
Fringilidae	Common Rosefinch	<i>Carpodacus erythrinus</i>	Vasuih
Estrildidae	Little Bunting	<i>Emberiza pusilla</i>	Ram chawngzawng
	Crested Bunting	<i>Melophus lathami</i>	Ram chawngzawngpui
Zosteropidae	Oriental White-eye	<i>Zosterops palpebrosus</i>	Mitval/Pirh/Uichirh
Sittidae	Chestnut-vented Nuthatch	<i>Sitta nagaensis</i>	Suklet
	Velvet-fronted Nuthatch	<i>Sitta frontalis</i>	Suklet
Sturnidae	Chestnut-tailed Starling	<i>Sturnia malabarica</i>	Vamam/Vapaw
	Common Hill Myna	<i>Gracula religiosa</i>	Vaiva
Passeridae	Eurasian Tree Sparrow	<i>Passer montanus</i>	Chawngzawng
	Scaly-breasted Munia	<i>Lonchura punctulata</i>	Pit awmtial
	White-rumped Munia	<i>Lonchura striata</i>	Pit(numvar)

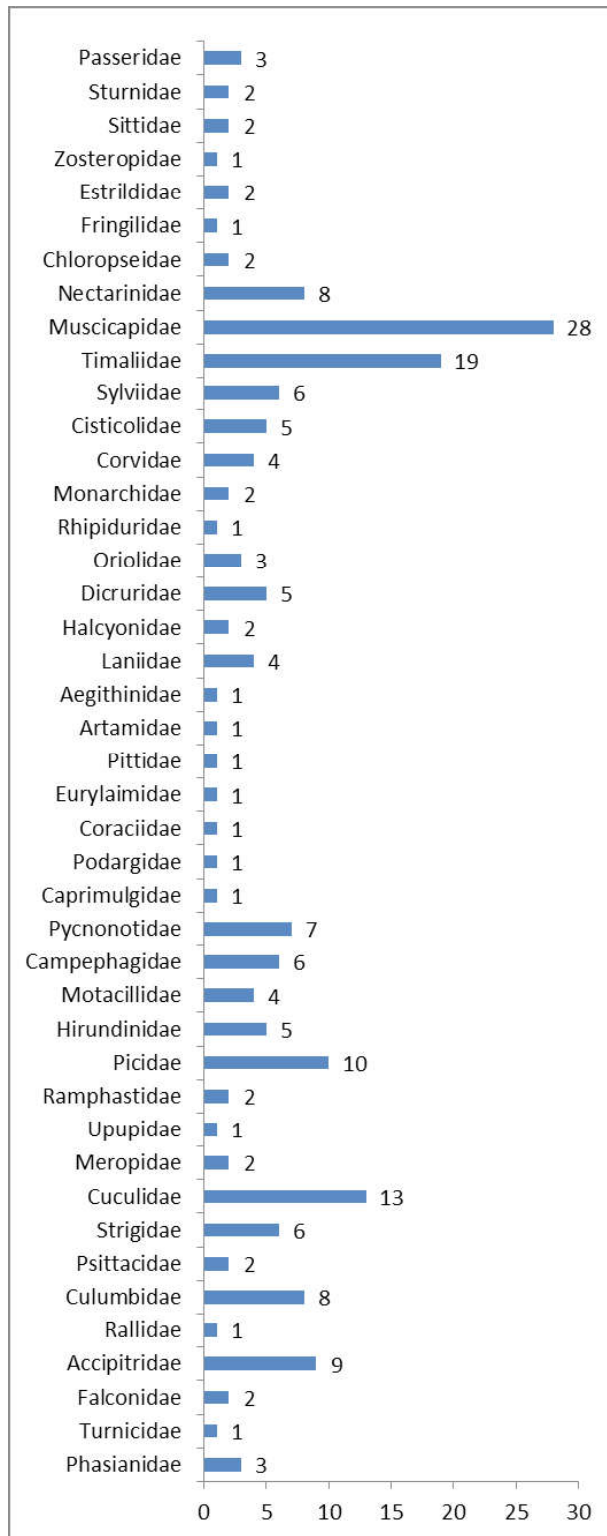


Fig. 1: Summary of Bird Species Recorded

Avian Diversity in Mizoram University Campus, Aizawl, Mizoram

Table 2: Birds Recoded during Winter Season (Winter Visitors)

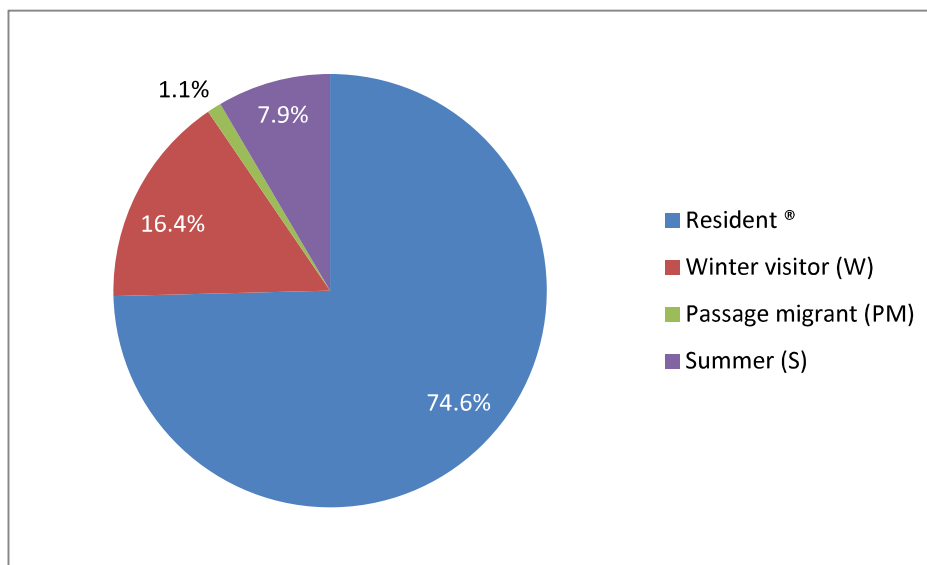
Family	English Name	Scientific Name	Mizo Name
Falconidae	Amur Falcon	<i>Falco amurensis</i>	Sialsir
	Common Kestrel	<i>Falco tinnunculus</i>	Mu te
Accipitridae	Oriental Honey Buzzard	<i>Pernis ptilorynchus</i>	Khuaimu
	Japanese Sparrowhawk	<i>Accipiter gularis</i>	Mute
	Common Buzzard	<i>Buteo buteo</i>	Munibuang
Psittasidae	Red-breasted Parakeet	<i>Psittacula alexandri</i>	Kiteng
	Vernal Hanging Parrot	<i>Loriculus vernalis</i>	Run vaki/Vaki te
Meropidae	Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	Fuanhawr
Upupidae	Common Hoopoe	<i>Upupa epops</i>	Chhuangtuar/Vaseek
Picidae	Eurasian Wryneck	<i>Jynx torquilla</i>	Valeisei
Hirundinidae	Brown-backed Needletail	<i>Hirundapus giganteus</i>	Murpui
	Fork-tailed Swift	<i>Apus pacificus</i>	Murpui
Motacilidae	Grey Wagtail	<i>Motacilla cinerea</i>	Lailen
	White Wagtail	<i>Motacilla alba</i>	Lailen var
Sylviidae	Yellow-browed Leaf Warbler	<i>Phylloscopus inornatus</i>	Chivit/Saivate/Chilim/Chhawlchhaih
	Grey-crowned Warbler	<i>Seicercus burkii</i>	Chivit/Saivate/Chilim/Chhawlchhaih
	Yellow-vented Warbler	<i>phylloscopus cantator</i>	Chivit/Saivate/Chilim/Chhawlchhaih
	Common Stonechat	<i>Saxicola torquatus</i>	Tep
Muscicapidae	White-capped Redstart	<i>Chaimarrornis leucocephalus</i>	Vachalde
	Verditer Flycatcher	<i>Eumyias thalassinus</i>	Vapawl
	Taiga Flycatcher	<i>ficedula albicilla</i>	Ter
	Grey-sided Thrush	<i>Turdus faea</i>	Tiau
	Long-billed Thrush	<i>Zoothera monticola</i>	Ramchippui hmuisei
	Dark-sided Thrush	<i>Zoothera marginata</i>	Ramchippui
	Siberian Rubythroat	<i>Luscinia calliope</i>	Tawktawk awrsen
	White-tailed Rubythroat	<i>Luscinia pectoralis</i>	Tawktawk awrsen(a chang var)
	Himalayan Bluetail	<i>Tarsiger rufilatus</i>	
	Blue-fronted Redstart	<i>Phoenicurus frontalis</i>	
	Dark-sided Flycatcher	<i>Muscicapa sibirica</i>	Ter
	Asian Brown Flycatcher	<i>Muscicapa dauurica</i>	Ter uk
Fringilidae	Common Rosefinch	<i>Carpodacus erythrinus</i>	Vasuih
Total Number of families: 11 and species : 31 are winter visitors			

Table 3: Birds Recoded during Summer Season (Summer Visitors)

Family	English Name	Scientific Name	Mizo Name
Cuculidae	Large Hawk Cuckoo	<i>Hierococyx sparverioides</i>	Kiltheihrawk
	Common Hawk Cuckoo	<i>Hierococyx varius</i>	Kiltheihrawk
	Asian Koel	<i>Eudynamys scolopaceus</i>	Mitthi ar
	Jacobin Cuckoo	<i>Clamator jacobinus</i>	
	Chestnut-winged cuckoo	<i>Clamator coromandus</i>	
	Banded Bay Cuckoo	<i>Cacomantis sonneratii</i>	Thangfenpabawp
	Asian Emerald Cuckoo	<i>Chrysococyx maculatus</i>	
	Lesser Cuckoo	<i>Cuculus poliocephalus</i>	Thangfenpabawp te zawk
	Hodgson's Hawk Cuckoo	<i>Hierococyx nicolor</i>	Kiltheihrawk
	Violet Cuckoo	<i>Chrysococyx xanthorynchus</i>	Mawntaipirtliak
Hirundinidae	Nepal House Martin	<i>Delichon nipalense</i>	Vamurte
Muscicapidae	Vivid Niltava	<i>Niltava vivida</i>	Be-ai-ral
	Blue-throated Blue Flycatcher	<i>Cyornis rubiculoides</i>	Vadumdeleng
	Small Niltava	<i>Niltava macgrigoriae</i>	Be-ai-ral te zawk
	Orange-headed Thrush	<i>Zoothera citrina</i>	Vakhuang
Total no of families: 3 and species: 15 are summer visitors			

Table 4: Passage Migrant Birds

Family	English Name	Scientific Name	Mizo Name
Pittidae	Hooded Pitta	<i>Pitta sordida</i>	Buarchawm lu uk
Motacillidae	Forest Wagtail	<i>Dendronanthus indicus</i>	Sehnungzui/Ngawkar Lailen

**Fig. 2: Patterns of Occurrence of Avian Groups**

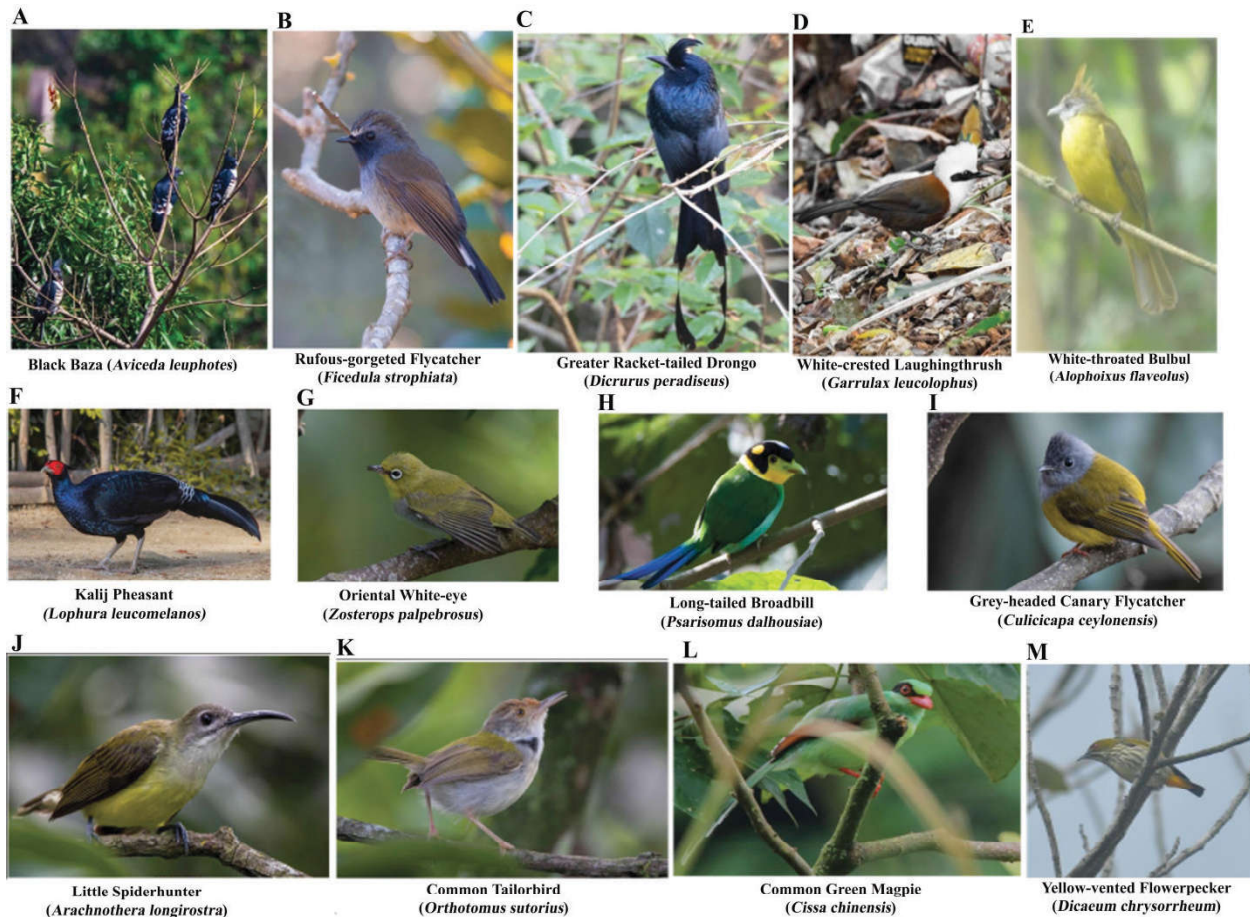


Fig. 3: Photoplate: Some Birds of Mizoram University (MZU) Campus

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