

Recording some of breeding birds in Mehmedan region of Republic Yemen

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ABSTRACT

Mehmedan region is always green and there are different trees, shrubs, herbs and a lot of land which cultivated by corn, millet and other monetary plants. The site has been identified by the authors as an important Bird Area and especially for passerines breeding birds. Aim of this paper is to recording of some breeding birds. Many field visits during the year (2012) were conducted and (13) breeding bird species were recoded, these birds relating to (5) Orders, (10) Families, and (11) Genera.

Key words: Breeding birds, Mehmedan, Yemen.

INTRODUCTION

At present time about (432) bird species were recorded in avifauna of Yemen of which (1) is endemic, (2) have been introduced by humans, and (25) are rare or accidental, (14) species are globally threatened. Mehmedan region located in southern Tehama which defined as lying south of (21⁰N) along the Saudi Arabian and Yemen Red Sea lowlands and east along the Gulf of Aden to approximately (46⁰E). Temperatures and humidity greatly increase southwards and rainfall decreases but the area has many permanent water courses and much subsurface water due to the considerable run-off of rainwater from the highlands. Consequently there is much more vegetation in the wadis and there is a good deal of traditional, small scale agriculture mostly of millet, sorghum and vegetables [1]. In vegetation places extensive tangled thickets of acacia mixed with many Afrotropical plants were found. Such fauna providing ideal feeding and nesting opportunities for many birds [2]. This paper considering as an attempt to recording some of breeding birds in Yemen.

Bird site description:

Mehmedan region located between (0⁰13.76.14 - 0⁰13.77.85N) north and (0⁰34.74.79 - 0⁰34.74.34E) west of Sherab Alronah district which belongs to Ta'iz governorate, the region is about (885 - 1364)m height of sea level. The region is about (10) km long from main city of Ta'iz. The weather is moderate throughout the year. The rainfall time is from March to November every year. In general the weather in all highlands is moderate and nice throughout the year, but it is extremely hot in coastal and desert regions [3]. The land consists of stony mountains and excellent fertile earth and there are some of valleys and natural springs and waterfalls. The region is always green and there were different trees, shrubs and herbs and a lot of land cultivated by corn, millet and other monetary plants. The site has been identified by the authors as an Important Bird Area but none of any Conservation measures was taken.

MATERIALS AND METHODS

Mehmedan region consist of various villages spreading throughout the highlands and small wadis. To facilitate survey, the whole region divided into sub-regions, different and intensive field trips have been undertaken in 2012 and aimed to cover and investigate all bird sites in woodland, bush land, steppes, mountains semi-arid regions and a

lot of cultivated Areas. The task was mainly concentrated on the observing and picturing of breeding birds species in the region. In spite of the shortage of necessary apparatus as digital telescope and binoculars but we managed to overcome the difficulties and make good results and nice bird pictures.

Investigated birds:

Arabian Partridge (Alectoris melanocephala):

Arabian Partridge is an endangered game bird in Yemen. Bird status is resident in rocky hillslopes with bushes between 250 - 2800m were present. The birds are usually occur in parties (5-8) birds [4]. In March and April the eggs were laid in a scratching on the ground under cover of a bush and their color are pale stone-white, fairly densely freckled with pale yellowish brown and in late March, (6) yellowish white eggs were discovered but unfortunately in few days later the eggs were eaten by foxes. Birds feed in rocky slopes on cultivated grains, fresh fruits, insects and small vertebrates.



Figure (1) Arabian Partridge and demolished nest

African Collared Dove (Streptopelia roseogrisea):

Birds distribution practically the whole of continental Africa, south of the Sahara and Arabia. Its status resident but recent range extension and found in semi-desert and savanna with trees, also coastal mangroves, parks, in towns and nests in trees and sometimes colonially [5]. The nest is placed in a thorn bush, often very conspicuous, and is a thin twig platform, two, sometimes one white eggs are laid between early March and up to July. In studied area one nest with three white eggs were discovered and treble brooded were hatched. Food is usually taken on ground, consisting of all sorts of seeds and considerable green food.



Figure (2) African Collared Dove eggs and chickens

Red-eyed Dove (Streptopelia semitorquata):

It is a resident dove and mainly between 500 - 1700m in vegetated areas with tall trees and fertile fruit -gardens, often in wadis near water [6]. The nest is placed in a thorn bush and two eggs laid from late March. One nest with two white eggs was observed till two young birds hatching. Feeds largely on the ground but also on fruit taken from the tree, especially small figs.



Figure (3) Red-eyed Dove eggs and youngs

Laughing dove (Streptopelia senegalensis):

Laughing dove is mainly resident and recent extensive range expansion in Yemen and were found in towns, villages, gardens, oases, savanna with trees and agriculture areas, nests in trees, bushes or houses, eggs or young in the nest recorded all year round, multi brooded. Two nests in agriculture area were seen, one nest with three young birds were seen and incubated by mother bird and the other nest contains a little pig young bird, see the picture.



Figure (4) Laughing dove and young

Bruce's Green Pigeon (Treron waalia):

Resident in the southwest and probably eastern Yemen and Dhofar, highland birds move to lower altitudes in winter such as in Tihama. Usually birds occur in flocks, sometimes up to forty birds, feeding mainly on wild figs. Green pigeon also found in gardens with tall trees, wooded wadis and nests in May and June but also in July. The nest is a flimsy platform of twigs in thick foliage in trees and two nests on different tree were found in the first nest two white eggs and the second two young birds were occurred as in picture below.



Figure (5) Bruce's Green Pigeon eggs and chickens

White-browed Coucal (Centropus superciliosus):

In Arabia is a resident in the south-west from Tihama, the lower levels of Yemen, Aden and western Hadhramout. Food is mostly taken on the ground, birds being fine hoppers and runners, they take all kinds of insects, small frogs and lizards. They are sedentary birds, build their own nests and hatch their own eggs. The nest were found in June and it is a large round structure of twigs, leaves and grass, open at the top and deep cupped. It contained three eggs, dull unspotted white. Three pure white eggs were seen and all of them were hatched, see the picture below.



Figure (6) White - browed Coucal and small chickens

African Grey Hornbill (Tockus nasutus):

The African Grey Hornbill is a widespread and common resident breeder in much of sub-Saharan Africa and into Arabia. Food is both animal and vegetable, in autumn it is predominantly berries, fruit and grain, in summer insects, lizards, a little vegetable matter and occasional young birds. They kill and pulp everything living, even snakes.

This is a bird mainly of open woodland and savannah. The female in April till November lays two to four white eggs in a tree hollow, which is blocked off during incubation with cement made of mud, droppings and fruit pulp. There is only one narrow aperture, just big enough for the male to transfer food to the mother and the chicks. In targeted area two chicks were found in tree's hollow of *Adenium obesum* and the pictures below consider as a prove for its reproduction in Yemen.



Figure (7) African Grey Hornbill and chickens in nest

Red - ramped Swallow (Hirundo daurica):

Summer visitor bird but occasional wintering in land and sea-cliffs and less cultivated areas, but in flat country frequents bridges and buildings. Flask-shaped nest with spout, the entrance is made from mud in caves, under rocky overhangs, bridge or buildings. Eggs June and July but nest building from April and adults at nests until August, One nest on the corner of an old house ceiling and one young bird were seen.



Figure (8) Red - ramped Swallow nest and small bird

Yellow - vented Bulbul (Pycnonotus xanthopygos):

A widespread and common resident in Yemen and found in trees and bushes, particularly berry-bearing, gardens, palm groves and wadis with cover. Nest in February until August in bush or trees, the nest is untidy structure like a cup and made of a thin wooded branches and leaves straw which lined from inner side with feather, hair and wool, female bird laid two white and brown reddish spotted eggs, only one egg hatched as in picture.



Figure (9) Yellow - vented Bulbul and nest

Arabian Babbler (Turdoidea squamiceps):

Widespread resident birds and inhabited in dry areas with scrub, scattered acacias, wadis, palm groves and savanna from sea level to 2400m. Feeding always insects and wild fruits. Nesting time is in March and April and the nest was laid in the heart of spiny and thick leaves tree, the nest is large and not fit constructed and three pale green eggs were found and later two young naked birds were seen as in picture below.



Figure (10) Arabian Babbler nest and two naked youngs

Ruppell's Weaver (Ploceus galbula) :

Resident bird and found everywhere in Yemen, in crops, palm groves, savanna, wadis with acacia and other bushes up to 2500m, commonest at lower altitudes, nest suspended from acacia or other large tree and nests as individual or in colonial. In March three nests in large trees by the authors were discovered, in one nest there were two eggs and in the second four eggs and in the last three nest two small young birds were seen as in pictures below.



Figure (11) Ruppell's Weaver nests, eggs and chickens

African Silverbill (Euodice cantans):

Small resident birds which are nesting in bush, crevice or old nests of weaver and sometimes will also build suspended nest. In crevice a big nest were found with six white greenish and spotted with dense red-brown color eggs as below. Extended breeding season with eggs July, young in the nest February and July.



Figure (12) African Silverbill and nest

House Bunting (Emberiza striolata):

This bird is resident and in some seasonal movements occurred and inhabited in desert oases, wild desolate rocky wadis with little vegetation, nest in holes of building, crack in wall or rock crevice and one nest in plastic pipe during February with three brown speckled eggs were deducted, see picture.



Figure (13) House Bunting and nest

RESULTS AND DISCUSSION

The exact numbers of breeding birds in Yemen are still unknown and there are many attempts to study and counteracting breeding birds in different regions of Yemen as in [7,8,9,10,11,12,13,14,15,16] and other studies. The another big survey to study breeding birds in Yemen it was The Atlas of the Breeding Birds of Arabia (ABBA), in my opinion, it is a great project to study breeding birds in Arabian countries which Yemen is one of them, but these efforts were not continued, and in this study and via maps indicated that, the breeding birds in Yemen are more than (150) species [7]. During our survey birds were watched in their habitats, nests and the young or chickens were counted and pictures were taken as a prove for breeding.

An important influence on the number and diversity of birds in Yemen is climate, which for most practical purposes means, the amount of rainfall and the regular rainfall which concentrated in the highlands of Tihama region and the richness and variety of plant life obviously directly influence the number of bird species, especially passerines, as *Ploceus galbula*, *Turdoides squamiceps* which can be found.

As we know from the behavior of wild birds, these birds are always fearful from human being and we will try to watch them from a long distance and do not disturb them, especially *Alectoris melanocephala*, which if it noticed any body, it will change its occurrence or nest and that what is happen exact with us many times, but in contrary in the case of Ruppell's Weaver which consider as common resident breeder in wadis and near human settlements.

During this work, breeding time, eggs and small chickens were recorded and on the same time nest shape was described as in table (1). In this paper, (13) breeding bird species were studied and scientifically classified according to the methodology of [17] as on the table (2).

Mehmedan region is very distinguishing site for resident and migratory birds in Yemen, but the knowledge and culture of the people is very weak and due to the shortage of food, some of them try to hunting wild birds as what will happened with Arabian Partridge birds, these birds strongly hunted by using machine guns or special traps and after then the birds were used for nutrition as in figure (14).

Arabian Partridge bird is now under threatened bird in Yemen. From and via this paper I am calling all responsible authorities in Yemen or in abroad to participate forsafeguarding and preserving the threatened bird species in Yemen. While Mehmedan region is an important bird site and considers as a rare destination for feeding, breeding and roosting to a lot of resident and migratory birdspecies and on the same time forming a source of national income for our homeland. In this regard, this place must be strong protected due to its environmental, geographical and historical characteristics, which to be used for the benefit of the area and its people in particular and the whole country as in general.

No	Breeding birds	Breeding time	Nest shape	Eggs	youngs
1-	<i>Alectoris melanocephala</i>	March and April	scratching on the ground under cover	6	-----
2-	<i>Streptopelia roseogrisea</i>	March and July	thin twig platform	3	3
3-	<i>Streptopelia semitroquata</i>	April and September	platform in a thorn bush	2	2
4-	<i>Streptopelia senegalensis</i>	All year	Fragile Platform of thin woods in trees	-----	3
5-	<i>Treron waalia</i>	March and July	flimsy platform of twigs in thick foliage in trees	2	2
6-	<i>Centropus superciliosus</i>	June	Large round structure of twigs leaves and grass, open at the top and deep cupped.	-----	2
7-	<i>Tockus nasutus</i>	April -November	in a tree hollow, which is blocked off during incubation with a cement made of mud	-----	2
8-	<i>Hirundo daurica</i>	Jun till August	Flask-shaped nest with spout ,the entrance is made from mud in caves	-----	1
9-	<i>Pycnonotus xanthopygos</i>	February until August	untidy structure like a cup and made of a thin wooded branches and leaves straw	1	1
10-	<i>Turdoides squamiceps</i>	March and April	large and not fit constructed in spiny and thick leaves tree	1	2
11-	<i>Ploceus galbula</i>	All times	in bush, crevice or old nests of weaver and sometimes	4	3
12-	<i>Euodice cantans</i>	February and July	In crevice or old nests of weaver	6	-----
13-	<i>Emberiza striolata</i>	February	in hole in building, crack in wall or rock crevice	3	-----

No	Orders	Families	Genera	Species
1-	Galliformes	Phasianidae	Alectoris	<i>Alectoris melanocephala</i>
2-	Columbiformes	Columbidae	Streptopelia	<i>Streptopelia roseogrisea</i>
				<i>Streptopelia semitroquata</i>
			Treron	<i>Treron waalia</i>
3-	Cuculiformes	Cuculidae	Centropus	<i>Centropus superciliosus</i>
4-	Coraciiformes	Bucerotidae	Tockus	<i>Tockus nasutus</i>
5-	Passeriformes	Hirundinidae	Hirundo	<i>Hirundo daurica</i>
		Pycnonotidae	Pycnonotus	<i>Pycnonotus xanthopygos</i>
		Timaliidae	Turdoides	<i>Turdoides squamiceps</i>
		Ploceidae	Ploceus	<i>Ploceus galbula</i>
		Estrildidae	Euodice	<i>Euodice cantans</i>
		Emberizidae	Emberiza	<i>Emberiza striolata</i>



Figure (14) Female Arabian Partridge hunted and prepared for food

CONCLUSION

Thirteen bird species as breeding birds were recorded in Mehmedan region which belongs to Ta'iz governorate of Republic Yemen. This region considers as one of an important bird site and it is in demand for necessary procedures of protection and preservation.

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