

Distribution and Abundance of Wetland Birds in FIFA Nature Reserve (Ramsar Site)

Abdullah Al-Oshoush, Mutaz Sarayrah
The Royal Society for Conservation of Nature,
RSCN. P.O.BOX1215, Jubaiha 1191, Jordan

Abstract:- Fifa Nature Reserve provide habitats for various types of birds in different seasons. The present paper discusses the diversity of water birds in the reserve which is a Ramsar site and the possibility of adding the fifth criterion of the Ramsar Convention to the Reserve is: (1) a wetland should be considered internationally important if it regularly supports 20,000 or more water birds; and (2) a wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of water birds. In total, 7784 individual, 30 Species of birds belonging to 10 families have been recorded. Lack of population availability Estimates of the types of water birds occurring in Fifa Nature Reserve It means that none of the two criteria apply to the reserve.

I. INTRODUCTION

Wetlands are defined as lands transitional between terrestrial and aquatic eco-systems where the water table is usually at or near the surface or the land is covered by shallow water (Mitsch and Gosselink, 1986). Fifa Nature Reserve a highly productive habitat forms a unique ecosystem that support thousands of migratory water birds each winter that either use them as wintering grounds or as stop-over places along migratory pathways. The bird researchers at the Royal Society for the Conservation of Nature carried out a special program to monitor the birds during the autumn migration.

In April 2017, the reserve was designated as the world's lowest elevation Ramsar Site, lying at 426 meters below sea level. The reserve supports the endemic Richardson's Killifish *Aphanius richardsoni* and the vulnerable dabb lizard

(*Uromastix egyptia*). It is considered an important habitat for many rare and endangered birds at the local and regional level, including the Nubian Nightjar *Caprimulgus nubicus* and the Dead Sea Sparrow *Passer moabiticus*. Very large numbers of migrant birds pass through the area in spring and autumn. (Ellis, 2017).

Wetlands are among the most productive ecosystems in the world and play vital role in flood control, aquifer recharge, nutrient absorption and erosion control. In addition, wetlands provide home for a huge diversity of wildlife such as birds, mammals, fish, frogs, insects and plants (Buckton, 2007). Wetlands are important bird habitats and birds use them for breeding, nesting, and rearing young ones.

Birds also use wetlands as a source of drinking water and for feeding, resting, shelter, and social interactions (Stewart, 2007). Birds are most conspicuous and significant component of fresh water wetland ecosystem and their presence or absence may indicate the ecological conditions of the particular areas (Rajbar and Zakaria, 2011).

II. MATERIALS AND METHODS

➤ Study site

Fifa Nature Reserve is located at the southwestern part of Jordan, about 33.5 km S-SE of the Dead Sea 157km north of Aqaba city [East 731366.653, North 3427479, 77] (Figure 1). center coordinates. Fifa Nature Reserve is located within the Sudanian (Tropical) Bio-Geographical Zone, which is characterized by high temperatures with warm winters and hot summers, combined with low annual rainfall of about 50-100mm/year.

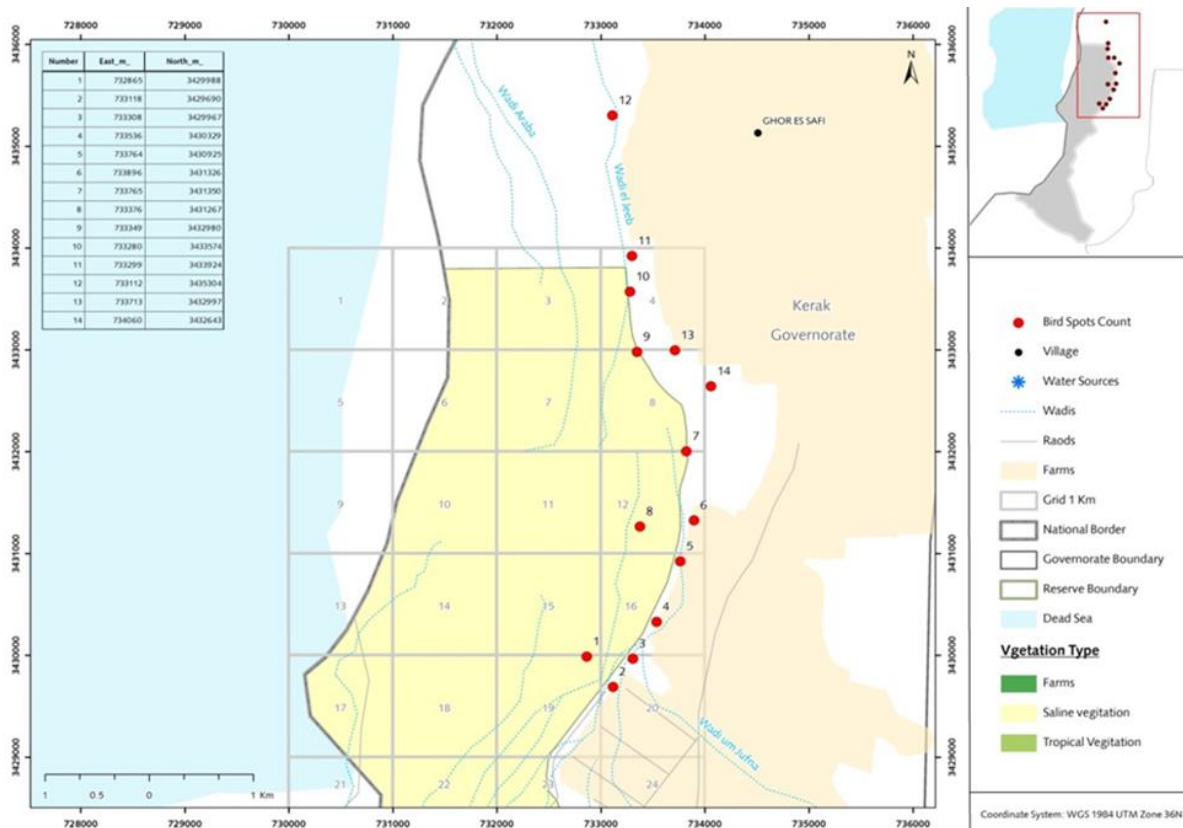


Fig 2:- Birds spout count in the Fifa Nature Reserve

IV. RESULT

A total of 30 species of water birds belonging to 10 families were recorded in Fifa Nature Reserve (Ramsar Site) from August 2017 to May 2018 (Table 1). 29 birds species belong the family, Anatidae contain 3 species, family Scolopacidae contain 07 species, Family Ardeidae contain 07 Species, Family Ciconiidae include 02 Species., Family Charadriidae have 03 Species, Family Recurvirostridae include 01 Species, Family Rallidae 02 Species, Family Threskiornithidae 01 Species, Family Podicipedidae 01 Species.

S1.No.	Family	Common Name	Scientific Name	Threats IUCN
1-	Ardeidae	GreatWhite Egret	Ardea alba	Lc
		Little Egret	Egretta garzetta	Lc
		Purple Heron	Ardea purpurea	Lc
		Squacco Heron	Ardeolaralloides	Lc
		Cattle Egret	Bubulcus ibis	Lc
		Bittern	Botaurus lentiginosus	Lc

2-	Anatidae	Mallard	Anasplatyrhynchos	Lc
		Teal	Anascrecca	Lc
		Garganey	Spatula querquedula	Lc
3-	Ciconiidae	White Stork	Ciconiaciconia	Lc
		Black Stork	Ciconianigra	Lc
4-	Rallidae	Common Moorhen	Gallinula Chloropus	Lc
5-	Recurvirostridae	Black-winged Stilt	Himantopushimantopus	Lc
6-	Glareolidae	Collared Pratincole	Glareolapratincola	Lc
7-	Charadriidae	Little Plover	Charadriusdubius	Lc
		Kentish Plover	Charadriusalexandrinus	Lc
		White-tailed Lapwing	Vanellusleucurus	Lc
		Spur-winged Lapwing	Vanellusspinosus	Lc
		Lapwing	vanellusvanellus	Lc
8-	Scolopacidae	Little Stint	Calidrisminuta	Lc

9-		Common Sandpiper	Actitishypoleucos	Lc	
		Wood Sandpiper	Tringaglareola	Lc	
		Green Sandpiper	Tringaochropus	Lc	
		Marsh Sandpiper	Tringastagnatilis	Lc	
		Common Snipe	Gallinagogallinago	Lc	
		Redshank	Persicariamaculosa	Lc	
		Spotted Redshank	Tringaerythropus	Lc	
		Threskiornithidae	Glossy Ibis	Plegadisfalcinellus	Lc
		Podicipedidae	Little Greebe	Tachybaptusruficollis	Lc
		10-			

Table 1. List of Avian Fauna (Birds) observed in the reserve.

The number of wetland birds observed varied between months (Fig. 3); with the largest number of birds recorded in December, while February had the least number of birds observed

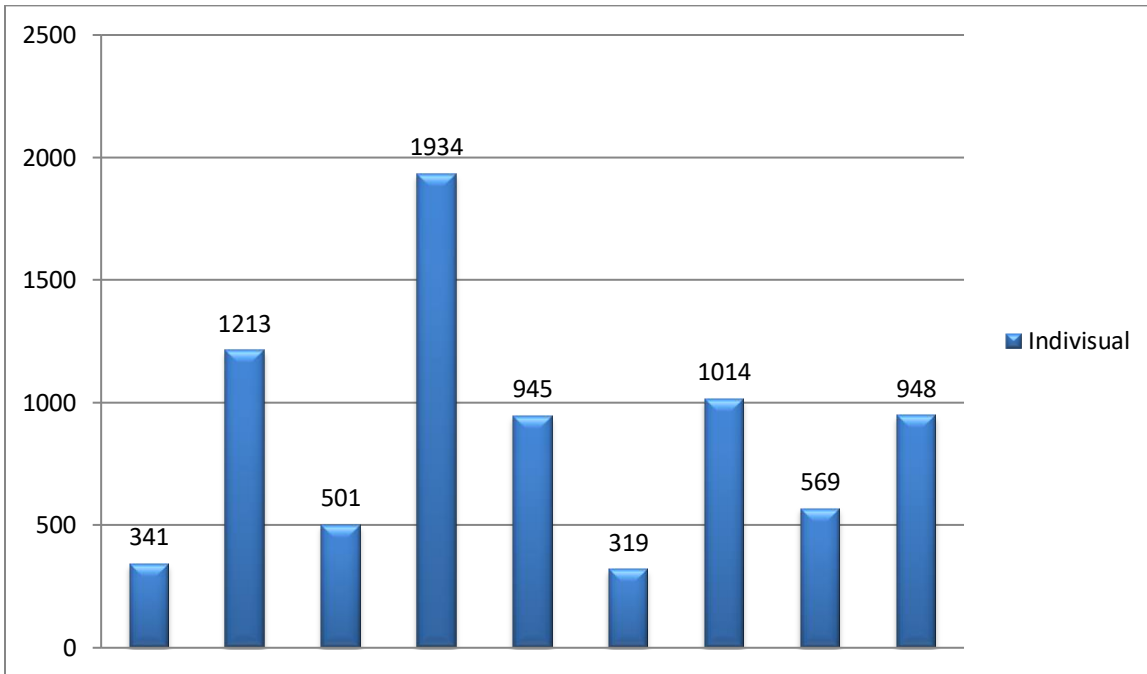


Fig 3:- The number of wetland birds observed varied between months

Some of the wetland species such as the Gray Heron (*Ardeacinerea*), Moorhen (*Gallinulatenebrosa*) and Spur-winged Lapwing (*Vanellusspinosus*), were observed to occur more frequently than others during this observation (Fig. 4).

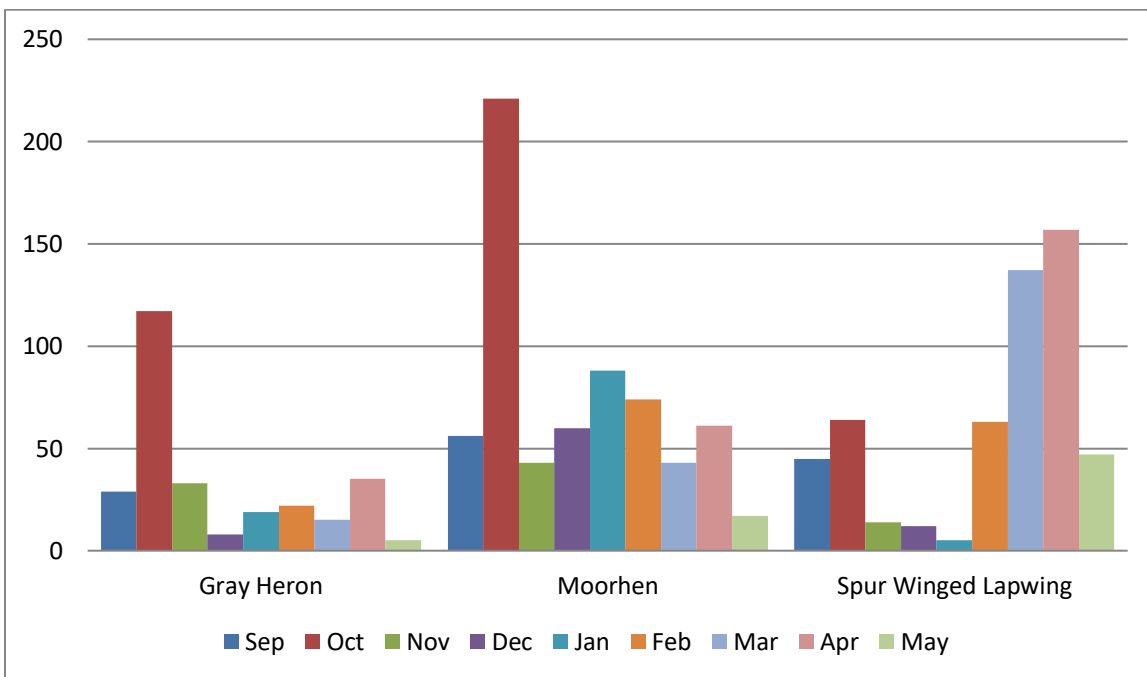


Fig 4:- Number of some species varied between month

Among the migrant waders the Green sandpiper (was the common species encountered and as for the waders they began to arrive The Reserve in October and then become most abundant in January, Several nesting birds were recorded.

V. DISCUSSION

The decline in the richness of species in this region is due to the low level of rainfall in the region during the year as well as the high temperature, which increases the high evaporation rates of the water within the reserve as well as the

multiple use of wetlands by sheep herders, the largest number of birds recorded in the middle of the month October to February and there was a decline in population size and movement during the month of April - June. This number of birds does not qualify the reserve to add the fifth criterion of the Ramsar Convention on Wetlands. The nesting of some Water birds, such as Spur winged lapwing and White stork , Moorhen, has been proven, as noted in the study of birds by (Ellis ,2017).

VI. CONCLUSION

Although the current study was restricted to a limited period of time (i.e. 1 August 2017 to 1 May 2018), it suggests that the avian fauna of Fifa Nature reserve is sufficiently rich in species diversity. Being the first survey of the area, it provides baseline information for future surveys/studies.

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