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THE BIRDS OF MAURITANIA

by John P. Gee

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Mauritania is a bridge between North and subsaharan Africa. Just as its people are a fascinating blend of the light-skinned peoples of Mediterranean Africa and the varied peoples of black Africa, so its birds are a mixture of species from the Palaearctic and Ethiopian Regions. Considering that it is primarily a desert country, its avifauna is surprisingly rich.

With an area of about 700,000 km² lying between 15° N and 27° N, Mauritania essentially covers the southern half of the western Sahara. However, as one travels south through southern Mauritania, the sand seas, gravel plains and barren black mountains of the true desert gradually give way to the acacia steppes, tamarisk plains and sandy semi-savannas of the subsaharan Sahel zone. The transformation from desert to Sahel mainly occurs between the 100 mm. and 250 mm. isohyets shown on the accompanying map (Fig. 1).

The only permanent body of fresh water of any consequence in the entire country is the Senegal River, which forms part of Mauritania's southern boundary. The interior lakes shown on some maps of Mauritania are mere 'sebkhas', or pans, many of which are highly alkaline. They usually are bone dry at the surface, but may occasionally hold surface water for a time after the rare and unpredictable rains. However, there are scattered oases, as well as areas where subsurface water can easily be reached by wells, and these sites are almost invariably occupied by people. In the extreme south, where rainfall is more reliable, are 'marigots', or sloughs and temporary lagoons, many of which are dependent upon the Senegal River. In years of good rainfall, or when the river overflows because of rains upriver in Senegal or Mali, these marigots hold water and living vegetation for some months after the rains cease. Near the town of Rosso, and elsewhere along the southern boundary of Mauritania, the variety of birdlife is increased by rice culture which is dependent upon the Senegal River for irrigation.

The rainy season lasts from late July through early October, but in some years little rain falls, and the few showers are concentrated in August and early September. Near the coast, as around the capital, Nouakchott, there may be a brief shower or two in January or February, usually in the early morning, but these are insignificant and do little to break the long dry season.

Since the rainy season coincides with the autumn migration of Palaearctic birds, autumn is usually an exciting time, whereas spring migration is often dull and sometimes hardly noticeable. During the annual rise in humidity from April onwards, many resident species begin breeding activity, and a number of Afrotropical species move northward into Mauritania to breed. This movement is greatest during years of heavier rainfall.

During the first two years of my residence in Mauritania (1972-73), the country was suffering from the same severe drought which affected other countries of the Sahel and received so much attention in the world press. The death toll was appalling. During autumn migration, emaciated bird corpses were so numerous in wind and water driven debris near some tidal pools along the coast, that one was given the impression of 'windrows' of dead birds. Inland, every dried waterhole and well was surrounded by the remains of jackals, foxes and other mammals, as well as birds.

In 1974 the rains were quite good, and the change was remarkable. Not only were Palaearctic migrants commoner, but there was a marked influx of Afrotropical migrants into southern Mauritania. In a favorite study area in the steppe region about 100 km south of Nouakchott, the normally barren trees came into leaf and bloomed, while grasses and wildflowers grew shoulder high where I was accustomed to walking on bare sand.

The diversity of Mauritanian birdlife is due in large part to the country being bounded on the west by the Atlantic Ocean. The sea there is one of the richest fishing areas of the world, and it is very attractive to pelagic species of birds. Along the coast, notably at the Banc d'Arguin, there are vast areas of shallow sea, islands and tidal flats. There de Naurois (1959) and subsequent explorers have found an abundance

of breeding birds, while later authors, such as Dick (1975), confirmed that the Banc is a major wintering area and migration stop for Palaearctic waders as well as other sea and water birds. Small lagoons and tidal inlets scattered elsewhere along the coast also help to increase the variety and richness of Mauritanian birdlife.

Bird observations are covered in the Appendix. They cover the period from May 1971 to November 1974 and consist primarily of my own observations, but also include significant contributions from Mr Norbert Montfort who arrived in Mauritania about a year before I did. Additionally, a few observations of other persons have been included where they were supported by specimens or photographs or otherwise checked for reliability. Field work was concentrated in the southwestern part of Mauritania, especially in the general area of Nouakchott and east and west of Mauritania's one paved highway, which runs some 450 km from Rosso, on the Senegal River, to the copper-mining settlement of Akjoujt, northeast of Nouakchott. Also included are my observations from other parts of Mauritania, including the interior.

The 326 forms listed are divided about equally between Palaearctic and Afrotropical species. This is a rough approximation, as there is considerable overlap and some Saharan species are difficult to assign to either Region. I have not attempted definitively to assign all species on the basis of origin. The purpose here is simply to emphasize that Mauritania's avifauna is made up of very significant proportions of species from each Region. However, of the approximately 100 species which were certainly or probably breeding residents, about two-thirds are primarily Afrotropical, and one-third Palaearctic or belonging to both Regions.

The Appendix documents the occurrence in Mauritania of Palaearctic species which had not previously been reported from the western end of the southern Sahara and western Sahel. For example, invasions of Common Buzzard Buteo buteo and Lapwing Vanellus vanellus occurred late in 1973. Most of the individuals observed were found dead or in extremely weak condition and it is probable that none survived the winter. All specimens examined were emaciated and dehydrated. The specimen of Buteo buteo which was preserved needs to be compared with other speci-

mens, as it does not appear to be vulpinus, which is regarded by Etchecopar and Hue (1964), Mackworth-Praed and Grant (1970) and others as the common migrant form in Africa to the east of Mauritania. Among a number of other interesting visitors from the north were an immature Golden Eagle Aquila chrysaetus 60 km North of Nouakchott, a dead Robin Erithacus rubecula near the Banc d'Arguin, and a Ring Ouzel Turdus torquatus observed in Nouakchott during January 1974.

Among African species of particular interest was the Nubian Bustard Neotis nuba, which was found to be quite common right up to the coast in Mauritania, although it had not previously been recorded west of Niger. Specimens of the Kordofan Bushlark Mirafra cordofanica were collected in the steppe region about 100 km south of Nouakchott, where it is undoubtedly a fairly common breeding resident. This species' range was previously thought to be far to the east of Mauritania, although Morel (1972) had observed what appeared to be vagrant individuals in northern Senegal.

Finally, an interesting vagrant of possibly more regular occurrence than the few records indicate, was Audouin's Gull Larus audouinii, with an adult found near the Banc d'Arguin and two immatures near Nouakchott.

ACKNOWLEDGEMENTS

I wish to express warmest thanks to Norbert Montfort for allowing me to incorporate into this paper his observations recorded during his tenure as Ambassador to Mauritania from the Federal Republic of Germany, and for his good company in the field during the long period when we were the only bird watchers in Mauritania. I also wish to thank William J. A. Dick and Peter J. Knight of the Oxford and Cambridge Mauritanian Expedition of 1973 for their companionship during the short time we spent together in Mauritania and for helping me to visit the Banc d'Arguin. I am especially indebted to John H. Elgood who encouraged me to publish some of my African records and with whom I shared many ornithological adventures. Finally, my thanks to Moktar ould Toinsi, my colleague, who did so much to make my stay in Mauritania enjoyable as well as productive.

SUMMARY

This paper treats about 325 species of birds observed in Mauritania in 1971-1974 by the author and Mr Norbert Montfort. Observations show that the avifauna is divided more or less equally between Palaearctic and Afrotropical affinities.

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Akjoujt	19°44' N	14°20' W	Keur Massene	16°30' N	16°20' W
Atar	20 32 N	13 08 W	Nouadhibou	20 54 N	17 01 W
Bir Mogrein	25 10 N	11 35 W	Nouakchott	18 09 N	15 58 W
Boghé	16 31 N	14 17 W	Fodor	16 35 N	15 02 W
Cap Timiris	19 35 N	16 30 W	Rosso	16 29 N	15 53 W
Chinguetti	20 25 N	12 24 W	Sélibaby	15 14 N	12 11 W
Gani	16 29 N	15 50 W	Tichit	18 21 N	09 29 W
Kaédi	16 12 N	13 32 W	Tidjikja	18 29 N	11 31 W
			Zouerate	22 44 N	12 21 W
Adrar	18°-23° N	10°-14° W			
Aftout-es-Sahel	16°-18° N	16°-16°30' W			
Banc d'Arguin (includes islands Arel, Serini, Tidra)	19°40'	-20° N	16°20' W		
Tagant	18° N	10°-13° W			

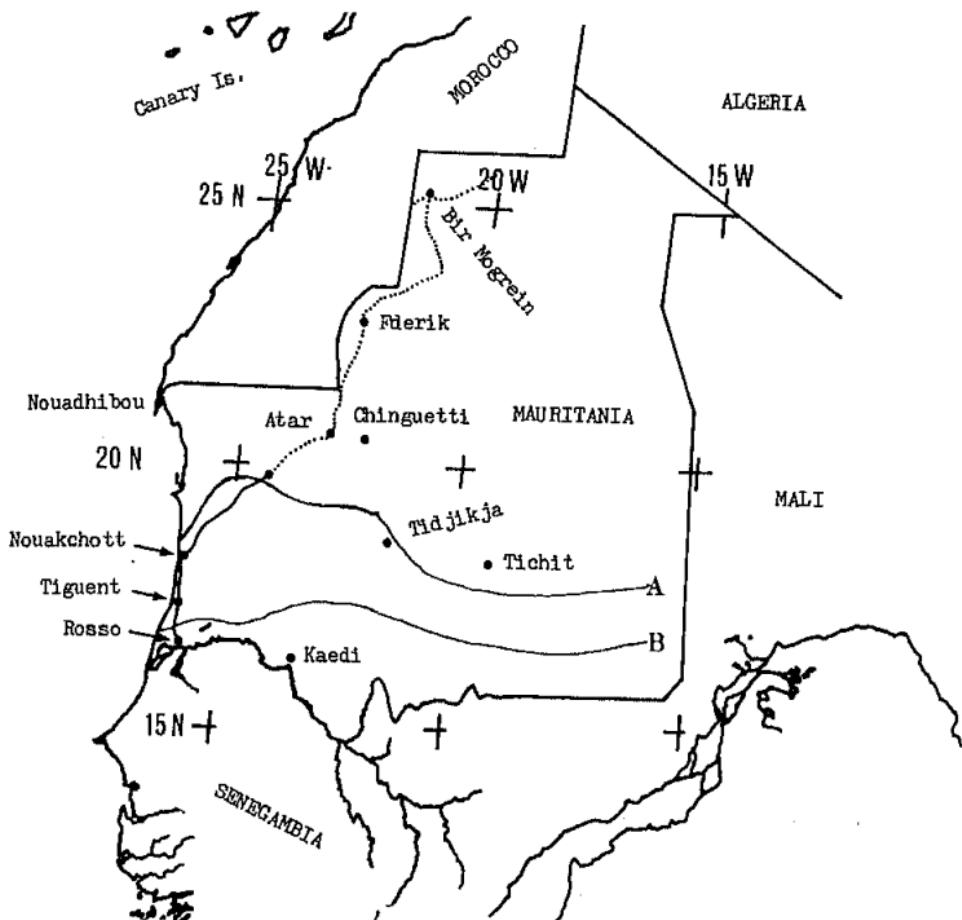


Figure 1 Sketch map of Mauritania showing 100 mm isohyet (A) and 250 mm isohyet (B). Compiled from various sources.

APPENDIX: MAURITANIAN OBSERVATIONS 1971-1974

SPECIES LIST:

- specimen(s) deposited in Museum of Natural Science,
Louisiana State University, Baton Rouge, Louisiana
- examined in hand

BAR-GRAFH: shows temporal distribution in

M Mauritania generally

N Nouakchott area (coastal strip inland to near
Rosso-Akjoujt highway, from c. 100 km north to
100 km south of Nouakchott)R ^{W2} Southeas~~ter~~ern Mauritania (from Senegal River to
within 100 km of Nouakchott)

--- many observations

x few observations

STATUS & REMARKS:	RE permanent resident	RSV	rainy season visitor*
	BR breeds in Mauritania	OV	occasional visitor
	PM passage migrant	?	status uncertain
	WV winter visitor	Nkt	Nouakchott

*Rains fall normally only in August-September. RSV applies here to Afrotropical species whose northward migrations are associated with the West African rainy season, some of which move north as early as April or May and nest before the rains. Some species remain as long as sufficient food and water are available, in which connection it should be noted that when the Senegal River reaches flood stage and fills nearby 'marigots' in autumn, the stay of certain RSV species is extended.

STATUS AND REMARKS

	J	F	M	A	M	J	J	A	S	O	N	D	
Manx Shearwater <i>Puffinus puffinus</i>	M			x									Single individual of race <u>mauretanicus</u> close in-shore 15 km south Nkt 21/9/74, near unusually large numbers of feeding terns.
- White-breasted Cormorant <i>P. carbo</i>	M	—	x	x	x	—	x	x	x	x			Abundant BR Ranc d'Arquin - eggs, young Isle Arel Nov 73. Often seen flying along coast near Nkt or even along Nouakchott-Rosso highway. Occasional at Rosso.
European Cormorant <i>P. carbo</i>	M		x	x			x	x	x	x			WV(?) 1 adult near Isle Arel 24/11/73 (JPG). 2 ad. 31/3, 1/4/72 at Cap Timiris (NM). Note: These birds could possibly be aberrant individuals of <u>linckii</u> stock (see NOSR, Vol. 6 No. 21).
- Long-tailed Cormorant <i>P. auritus</i>	M	—	—	—	—	—	—	—	—	—	—	—	BR Ranc d'Arquin. Common RE river area - moves north in rainy season to occupy mariqots and temporary ponds. Not noted in Nkt area.
Anhinga <i>Anhinga rufa</i>	R	x					x	x					Probably RE-W to river area. Nine near Rosso Sep. 74. Nov., Feb between Rosso and Podor.
- Gannet <i>Sula bassana</i>	M	—	x	—	—	—	x	—	—	—	—	—	PM and WV offshore - sometimes numerous off coast between Nkt and Cap Timiris.
- White Pelican <i>Pelecanus onocrotalus</i>	M	—	—	—	—	—	—	—	—	—	—	—	RR. Nests Ranc d'Arquin - eggs, young Isle Arel Nov 73. Flocks often seen over Nkt and elsewhere near coast.
- Grey Heron <i>Ardea cinerea</i>	M	—	—	x	—	—	x	—	—	—	—	—	Race <u>monicae</u> RR Ranc d'Arquin - eggs, young Nov 73. European race common PM and WV. Migrates across desert - 3 dead seen Dec 73 at oil drillsite 160 35°N 8050'W. Common river area where presumably PF.
Purple Heron <i>A. purpurea</i>	M	x		x	x	x	x	x	x	x	x	x	Uncommon PM-WV. Once near Fosso in February. Once flying offshore Nkt in August (NM), one at pond near Nkt Jun, and one Sep.

	J	F	M	A	N	J	J	A	S	O	N	D
- Great White Heron <i>Egretta alba</i>	R	—										
Yellow-billed Egret <i>E. intermedia</i>	R				x	x	x					
- Little Egret <i>E. garzetta</i>	M	—										
	N	—										
	R	—										
- Reef Heron <i>E. garzetta gularis</i>	M	—		x								
	R	x										
- Cattle Egret <i>Ardeola ibis</i>	N	x			x	x	x	x				
	R	—										
Squacco Heron <i>A. ralloides</i>	R	x	x	x	x	x	x	x				
	N	—										
Green-backed Heron <i>Butorides striatus</i>	R				x	x	x	x				
Night Heron <i>Nycticorax nycticorax</i>	R				x	x	x	x				
European Bittern <i>Botaurus stellaris</i>	N				N							
- Little Bittern <i>Ixobrychus minutus</i>	R				N							
Hammerkop <i>Scopus umbretta</i>	R	—										

RE - moderately common river area probably throughout year.

RSV(?) - In small numbers near river, especially rice-fields.

Common RE river area. Moves north as far as Nkt after rains. Flocks sometimes seen flying along coast near Nkt. BR Banc d'Aquin.

Abundant BR Banc. Occasional near Rosso and probably common and regular near mouth of Senegal River. Not seen at Nkt.

Common RE(?) river area. Irregular RSV/WV Nkt area.

PM(?) Common autumn visitor Rosso ricefields and along river between Rosso and Boghe. 7 birds in breeding plumage 30/6/74 at pond 15 km SE Nkt constitute only Nkt record.

Common RE(?) river area. Probably RSV, common near river.

PM or RSV. Fairly common autumn near Rosso. Several Sep records at pond k5 km south of Nkt.

PM - one record only - NM qarden 15/1/74.

One record - imm. recently dead and partially eaten by predator at temporary waterhole 20 km north Nkt 24/9/74.

HR-RE or RSV-WV(?) - Regular around Rosso. A number of unoccupied nests found near Rosso Jul-August 1974 in thick woodland which is flooded in rainy season, but no birds seen in area at that time.

J F M A M J J A S O N D

	M	N	BR Ranc.	PM and OV along coast near Nkt.
- European Spoonbill <i>Platalea leucordia</i>				
- White Stork	M	x x x	x	x PM and (?) WV. Migrates across desert. - c. 30 over Tichitt 26/12/73. Migratory movement early February - single birds seen Nkt, Nouadhibou and 19°35'N 8°50'W Feb 74. Probably winters river area. 6 Nouadhibou 17/5/74.
Wood Ibis <i>Ibis ibis</i>	N		x	2 ad. 6/10/73; 1 ad. and 1 juvenile 13/10/73 near Nkt. 3 adults 15 km S . Nkt 13/7/74.
Marabou <i>Leptoptilus crumeniferus</i>	R	x	x x	Probably RF river area - uncommon; suspect numbers diminished by drought.
- Greater Flamingo <i>Phoenicopterus ruber</i>	M			Abundant BR Ranc. Nkt area PM and OV to lagoons and ponds along coast. Regular at Nouadhibou.
Lesser Flamingo <i>P. minor</i>	M		x x	About 500 at lagoon in Aftout-es-Sahel (Chott Bou) 12/5/74 - too little water to accommodate nesting. About 1000 seen during flight over Ranc Jun 74.
White-fronted Goose <i>Anser albifrons</i>	M		x	Rare WV - 2 at Seremni (Ranc d'Arquin) 26/11/73.
Spur-winged Goose <i>Plectropterus gambensis</i>	R		x x x	RSV near Rosso, in small numbers.
Knob-billed Goose <i>Sarkidiornis melanotos</i>	R	x		Seen once by NM east of Rosso (8 birds)
Shelduck <i>Tadorna tadorna</i>	M		x	Rare WV - 1 near Cap Timiris 26/11/73.
- Egyptian Goose <i>Alopochen aegyptiacus</i>	M	x	x	2 at Keur Massene hunting preserve in river area Feb 72 and a flock of 35 at beach near Nkt on 16/6/72 (NM). Hunters reported small flocks between Nkt and Cap Timiris May-June 72.

J F M A M J J A S O N D

- Black Kite <i>Milvus migrans</i>	N _____ R _____	x x x x x x x —	Common and regular RF river area. Uncommon and irregular Nkt area except in winter when large flock (100-200 birds) stay near city and city dumps. Summer birds river and Nkt areas have yellow bills whereas winter birds Nkt have black bills. Also along coast north to Nouaftibou irregularly and in interior to Tidjikja in rains.
Shikra <i>Accipiter badius</i>	N _____ R _____	x x —	RSV. Rare Nkt - 2 imm. NM garden 24/8-2/9/73. Common river area.
- Dark Chanting Goshawk <i>Melierax metabates</i>	N x _____ R —	x x x x x x x x x x —	Irregular Nkt area. Common and presumably RF river area.
Marsh Harrier <i>Circus aeruginosus</i>	M _____ N _____	— — — — —	Common PM Nkt area. Also Oct records river area and Nov records Banc area.
Hen Harrier <i>C. cyaneus</i>	M _____	x (x)	Rare PM - careful sight record of adult male under good conditions 10 km south of Nkt 24/9/72. A probable female or imm. Keur Massene (river area) (10/72).
Pallid Harrier <i>C. macrourus</i>	M _____ N _____	x x —	Uncommon PM. 1 ad. male Rosso ricefields 10/73 with 4-5 probable females or imm. 1 male Nkt 9/73.
Montagu's Harrier <i>C. pygargus</i>	M _____ N _____	— —	Very common PM. Undoubtedly WV river area.
Osprey <i>Pandion haliaetus</i>	M _____ N _____	x x x x x —	Common PM and WV,
- Peregrine <i>Falco peregrinus</i>	M x _____ N _____	x x x x x x —	PM. Most often seen in Nkt area in Aug. Once at Rosso Feb.
Barbary Falcon <i>F. pelegrinoides</i>	N _____	x	One record; flying along coast near Nkt 1973.
Lanner <i>F. biarmicus</i>	M _____ N _____	x x	Near Akjoujt, Tichitt, Tidjikja Aug, and Oct-Dec. Near Nkt Aug and Oct. Probably RF. In Tagant and Adrar.

Red-Necked Falcon <i>F. chicquera</i>	R	x x x x	x x x x	Once near Podor (NM). Once in Aug 60 km north Rosso. Pair 18/9/74 Rosso carrying Dunlin and 29/9 catching and eating yellow wagtail. Probably RSV - Possibly resident near river.
Grey Kestrel <i>F. ardosiaceus</i>	R	x	x	RSV - once 50 km north of Rosso.
- Lesser Kestrel <i>F. naumannii</i>	M N	x x	x x	PM and WV. Few definite records (due at least in part to similarity in field with next species).
- Kestrel <i>F. tinnunculus</i>	M N	— —	x x	Common PM. Fairly common WV.
Double-Spurred Francolin <i>Francolinus bicalcaratus</i>	R	— —	— —	Numerous RE river area - moves north to about 100 km from Nkt during rains.
Guineafowl <i>Numida meleagris</i>	R	x	x	Seen once by NM river area (40 birds) (Reported to be common RF Kaedi-Selibaby area).
Common Quail <i>Coturnix coturnix</i>	N	x x	x — —	PM and WV often seen near Nkt 1972-73 and autumn 1974 following good rains but missing 1973 after poor rains. Seen near Tidjikja 10/72 and picked up dead bird Cap Timiris 11/73.
Crowned Crane <i>Balearica pavonina</i>	R	— —	x	RSV - once river area (Keur Massene) 2 birds - probably pair.
+ Arabian Bustard <i>Ardeotis arabs</i>	N R	x x	x x	RE. Rather common in area centred about 100 south of Nkt.
- Nubian Bustard <i>Neotis nuba</i>	M	x x	x x	RE. Rather common. Centre of abundance is north of that of <u>Ardeotis</u> ; tends to move south in winter; tends to be gregarious. Seen in desert north of Tidjikja and Tichit in Feb and Aug where it is reported to be the common bustard. Ranc are (on mainland) Nov 73.
Dwarf Bustard <i>Lophotis ruficrista</i>	R	x	x x	Probable RE Rosso area. As many as 4 males in one day.

Spur-Winged Plover <i>V. spinosus</i>	R N	x x x		Common RF - most numerous before and during rains when a few moves north into Nkt area.
Black-Headed Plover <i>V. tectus</i>	N R	x x _____		BR moving north in rains - dead chicks seen on highway in Nkt area in Sept.
Wattled Plover <i>V. senegallus</i>	R x		x	Restricted to river area - probably commoner than present records indicate.
Turnstone <i>Arenaria interpres</i>	M N	x x	x x x	PM and WV - irregular Nkt but not uncommon.
Common Snipe <i>Gallinago gallinago</i>	M	x	x x x	Uncommon PM along coast and river area. Only Nkt record October.
Jack Snipe <i>G. minimus</i>	N		x	PM. One record - single bird in salicornia at pond 15 km SW Nkt 11/73.
Curlew Sandpiper <i>Calidris ferruginea</i>	N	_____	_____	Common PM-WV Nkt area. Also records for Rosso Oct and Cap Trimiris Oct and Nov.
Dunlin <i>C. alpina</i>	N	_____	_____	Abundant PM and common WV - Also common river area, Banc and Nouadhibou.
Little Stint <i>C. minuta</i>	M N	_____	_____	Abundant PM-WV.
Knot <i>C. canutus</i>	N	_____	_____	Common PM-WV Nkt area. Abundant Banc area.
Sanderling <i>C. alba</i>	N	_____	_____	PM and WV - common throughout year Nkt. Seen in Rosso ricefield in Oct.
Common Sandpiper <i>Tringa hypoleucos</i>	N R	_____	_____	PM - abundant summer and early autumn Nkt and river areas. Sep records for Nouadhibou.
Wood Sandpiper <i>T. glareola</i>	N R	x	x x	PM rather scarce Nkt area. More common near river where probably WV. Recorded Tidjikja Aug.

Green Sandpiper <i>T. ochropus</i>	N	x	x x x x	x x x x	PM - regular Nkt and river areas. Also recorded Tidjikja Aug.
Redshank <i>T. totanus</i>	N	—	—	—	PM and WV - regularly seen in flocks in Nkt area in autumn, including large numbers offshore Nkt. Also common river area and in large numbers on Banc. Offshore birds are flying south.
Spotted Redshank <i>T. erythropus</i>	M	x	x x x	x x x	Uncommon PM Nkt and Banc areas. PM-WV Rosso area usually in small numbers.
Greenshank <i>T. nebularia</i>	M	—	—	—	Common PM Nkt area. Numerous PM-WV river area.
Marsh Sandpiper <i>T. stagnatilis</i>	N	x	x x x x	x x x x	PM and WV - uncommon.
Ruff <i>Philomachus pugnax</i>	M	—	—	—	PM - WV. Common, often abundant. Sometimes in very large flocks. Flocks landed at camp in desert 19°30'N 8°10'W Aug-Sep 72.
Curlew <i>Numenius arquata</i>	N	x	x x x x	x x x x	PM-WV. Regular but not numerous Nkt and river area. Numerous Banc Oct-Nov.
Whimbrel <i>N. phaeopus</i>	M	—	—	—	PM - common autumn Nkt area with large flocks moving south offshore along with many other waders. Numerous records Banc at Nouadhibou. Jan. Also Banc records Nov.
Black-Tailed Godwit <i>Limosa limosa</i>	N	x	x x x x	x x x x	PM Nkt irregular and in small numbers; WV river area where hundreds seen in Rosso ricefields Jan. Also Banc records Nov.
Bar-Tailed Godwit <i>L. lapponica</i>	M	—	x	—	PM-WV. Small numbers but regular Nkt. Enormous numbers Banc. Recorded Rosso area Jan-Feb.
Avocet <i>Recurvirostra avosetta</i>	N	—	x x	x —	PM and WV - remains at pond near Nkt until it becomes too dry in winter. Also recorded Cap Timiris Apr.

	J	F	M	A	M	J	J	A	S	O	N	D
Stilt <i>Himantopus himantopus</i>	N					x	x	x	x			
- European Stone Curlew <i>Burhinus oedicnemus</i>	R											
Senegal Thick-Knee <i>B. senegalensis</i>	R	x				x	x	x				
- Spotted Thick-Knee <i>B. capensis</i>	N		x	x	—	x	x	x				
Pratincole <i>Clareola pratincola</i>	N		x	x	x	x	x	x				
- Cream-Coloured Courser <i>Cursorius cursor</i>	R	x				x	x	x				
Temminck's Courser <i>C. temminckii</i>	R		x	x	x	x	x	x				
+ Violet-Tipped Courser <i>Rhinoptilus chalcopterus</i>	R											
Egyptian Plover <i>Pluvianus aegyptius</i>	R		x	x	x							
Arctic Skua <i>Stercorarius parasiticus</i>	N					x						
Herring Gull <i>Larus argentatus</i>	N			x	x							
- Lesser Black-Backed Gull <i>L. fuscus</i>	N											

Visits Nkt area during and after rains. Common river area - probably RE.

BR-RE Nkt area; chicks Nov 1974. Numbers apparently augmented by PM-WV from north.

After rains extends up to 80 km north of Rosso.

RSV north to Nkt - undoubtedly breeds.

Uncommon and irregular PM Nkt. Probable WV river area in years of good rainfall.

BR Nkt - chicks seen Apr, July and Aug. Also recorded in desert north of Tichitt Dec-Feb. Probably PM-WV only in river area.

Recorded only 4 times at Keur Massene Hunting Reserve and along highway up to 100 km from Nkt. Frequent autumn 1974 up to 100 km south Nkt. Usually in pairs. RSV or RE(?)

Three records - Senegal River. Near Roche Nov - several birds (NM). 4 birds Rosso 28/8/74 (JPG). 17 near Rosso 29/9/74.

Only one sure record offshore Nkt but numerous unidentified skuas Oct-Jan undoubtedly include this species.

1 ad. near Nkt 4/7/71 (NM). One probable imm. Nkt 25/10/71 (NM).

Abundant non-breeding visitor Nkt area and all along coast.

Slender-Billed Gull <i>L. genei</i>	M	N	x x x x x x x	BR Banc. Regular visitor Nouadhibou. OV Nkt.
Black-headed Gull <i>L. audouinii</i>	M	M	x	WV all along coast. Not present Nkt until Dec, except 1 recorded Aug 74. Seen at Rosso Feb.
Grey-Headed Gull <i>L. cirrocephalus</i>	M	M	x	BR Banc. Numerous Nov 73 but not nesting. Once Rosso Sep 74.
Little Gull <i>L. minutus</i>	M	M	x	Rare WV - one record Cap Timiris (NM).
Gull-Billed Tern <i>Sterna nilotica</i>	N	R	—	PM Nkt area - often well inland. Probably both PM and WV river area. Common. BR Banc.
Caspian Tern <i>S. tschegrava</i>	N	R	—	BR Banc. Common visitor Nkt area. WV river area.
Royal Tern <i>S. maxima</i>	M	M	—	BR Banc. Abundant visitor Nkt area.
Lesser Crested Tern <i>S. benghalensis</i>	N	N	x	One record 16/10/71 - 10 birds at Nkt wharf with Caspian Royal, Sandwich and other terns. Carefully observed (NM).
Sandwich Tern <i>S. sandvicensis</i>	N	N	—	Common non-breeding visitor all along coast.
Common Tern <i>S. hirundo</i>	N	N	x x —	BR Banc. Regular Nkt area but sometimes in surprisingly small numbers.
Arctic Tern <i>S. paradisaea</i>	N	N	—	PM - large flocks stopover in Nkt area during summer and early autumn when far out numbers Common Tern in local roosting areas.
Roseate Tern <i>S. dougallii</i>	N	N	x	(x) 1 ad. on coast near Nkt Aug 73 (also ca. 6 with other terns and gulls near Wharf Dec 69 - they were calling and were carefully checked by JRG

	J	F	M	A	M	J	J	A	S	O	N	D
Little Tern <i>S. albifrons</i>	N		x	x	x	x	x	x	x	x	x	RR Banc
Black Tern <i>Chlidonias niger</i>	N											Enormous flocks all along coast during summer and autumn.
White-Winged Black Tern <i>C. leucoptera</i>	M		x	x	x	x	x	x	x	x	x	Seldom recorded PM Nkt and river area.
Whiskered Tern <i>C. hybridia</i>	R	x	x			x	x	x	x	x	x	Probably not uncommon WV and PM river area. Only one record Nkt area. (Often recorded nearby in Senegal).
Spotted Sandgrouse <i>Pterocles senegalensis</i>	M											RE. During rainy season often observed on Akjoujt Highway ca. 200 km north of Nkt. In Dec 72 after rainy season ca. 300 birds appeared in Nkt and stayed until next rainy season.
Chestnut-Bellied Sandgrouse <i>P. exustus</i>	N											RSV Nkt. RE river area. Common.
Speckled Pigeon <i>Columba guinea</i>	R						x	x	x	x	x	One record - Kaedi (where probably common RE). Recorded twice.
Red-Eyed Dove <i>Streptopelia semitorquata</i>	R						x	x	x	x	x	Probably only a RSV to river area. Uncommon.
Mourning Dove <i>S. decipiens</i>	R											Probably RE river area. Common around marigot and ponds.
Rosy-Grey Dove <i>S. deactoicto</i>	N											Abundant RR. Present throughout year Nkt but numbers vary. Nesting activity observed north of Nkt Sep. Observed at Tidjikja in Oct.
Vinaceous Dove <i>S. vinacea</i>	R	x							x	x	x	RSV or RF river area - probably more common and regular than our records to date indicate. (One probable record Nkt area Sep.).

Didric Cuckoo <i>C. caprius</i>	R						RSV to river area - common.
Senegal Coucal <i>Centropus senegalensis</i>	N	R		x	x	x	One record Nkt Sep 72. NM had Nov-Dec records upriver from Rosso but not observed near Rosso.
Desert Eagle Owl <i>Bubo bubo ascalaphus</i>	M	x	x		x	x	RF - probably quite common. Most records Nkt area from dead birds on highway. Heard Nov at Serini (Banc area).
Scops Owl <i>Otus scops</i>	M	x	x		x	x	1 captured and measured Nkt Nov 73. Heard Nkt May 73 and Nov 74, Nouadhibou Feb 74. Palearctic
White-Faced Owl <i>O. leucotis</i>	R			x			One record - two in comparatively thick woodland at Marigot near Rosso 20/7/74.
Short-Eared Owl <i>Asio flammeus</i>	N	x					1 dead on highway 100 km south Nkt Jan 74. Single live bird in and near Nkt Jan 74. FM and possibly W.
European Nightjar <i>Caprimulgus europeus</i>	N		x				FM Nkt area sometimes numerous in autumn.
Red-Necked Nightjar <i>O. ruficollis</i>	M			x	x		FM - dead birds picked up Nkt Nov 72 and Oct 74, Serini (Banc) Nov 73.
Egyptian Nightjar <i>C. aegyptius</i>	N	x	x		x	x	Rather uncommon Nkt area. Not yet observed river area.
Plain Nightjar <i>C. inornatus</i>	M						Common RSV river and Nkt area - collected 1 bird of pair 23/8/73 and it proved to be male in breeding condition. Saw 3-4 prs. Tidjikja Aug 72 resting in cave-like overhangs and crevices of rocky ridge (habitat where one might expect Freckled Nightjar <i>C. tristisoma</i>). When flushed sometimes gives double <u>clap</u> with wings thought to be some sort of display.

	J	F	M	A	M	J	J	A	S	O	N	D
+ Grey-Headed Kingfisher <i>H. leucocephalus</i>	M		x	x								
+ Striped Kingfisher <i>H. chelicuti</i>	R		x	x	x							
European Bee-Eater <i>Merops apiaster</i>	N					x	x					
+ Blue Checked Bee-Eater <i>M. superciliosus</i>	N	—										
Carmine Bee-Eater <i>M. nubicus</i>	R					x						
+ Little Green Bee-Eater <i>M. orientalis</i>	R	—				x						
Least Bee-Eater <i>M. pusillus</i>	R	x										
Red-Throated Bee-Eater <i>M. bullocki</i>	R	x										
+ White-Throated Bee-Eater <i>M. albicollis</i>	N											
European Roller <i>Coracias garrulus</i>	N		x									
+ Abyssinian Roller <i>C. abyssinica</i>	R	x	x									

RSV - one 12 km north Nkt 8/6/74 and two at marigot near Rosso 20/7/74. Apparently uncommon, possibly only a vagrant Nkt area.

RSV. Seen only in comparatively well-wooded portions of acacia steppe 50-60 km north of Rosso. Singing, but not established whether BR or post-breeding visitor.

Common BR and RSV. Arrives Nkt area July and remains as long as there is greenery - much less common 1973 than 1972 due poor rainy season. Nests Nkt and Rosso 1974.

Only record along Senegal River Nov 71 (NM).

RSV Senegal River and nearby marigots - not numerous. Juvenile collected Aug 74 - BR (?).

Once - river area (NM).

RSV - very common. Undoubtedly BR.

PM - usually uncommon. Also river area Aug-Sep. In late autumn difficult to identify in Rosso area because abyssinica moulting.

RSV - common. Less common W as water dries up.

J J A S O N D

-	Hoopoe <i>Upupa epops</i>	M N R			Common throughout year Nkt area. Courtship activity noted Nkt. Probable BR RE but numbers augmented by migrants from north. Also noted Banc area spring and autumn and Trdjkja Aug.
-	Green Wood-Hoopoe <i>Phoeniculus purpureus</i>	R	x	x x	RSV to wooded steppe 50-60 km north Rosso. Uncommon.
+	Little Wood-Hoopoe <i>Scopelus aterrimus</i>	R	x	—	River area only - RSV or RE (?). BR - feeding young 3/8/74 50 km north of Rosso.
-	Grey Hornbill <i>Tockus nasutus</i>	R	—	—	RSV. 3 birds 50 km north of Rosso Sep 73. Abundant 1974.
-	Red-Billed Hornbill <i>T. erythrorhynchos</i>	R	—	—	RE - river area - fairly common.
+	Viellot's Barbet <i>Lybius viellioti</i>	N R	x x x x	x x x	Probably BR-RE - common river area. Irregular Nkt area. Pairs duet-ting July-Oct - probably nests in rains. Seen mating 10/8/74 60 km north Rosso.
-	Yellow-Fronted Tinkerbird <i>Pogoniulus chrysoconus</i>	R	—	x	RSV - several singing 3/8/74 in thick woodland at marigot near Rosso which flooded and inaccessible when rains begin. Collected male in breeding condition.
+	Fine-Spotted Woodpecker <i>Campetherapunctuligera</i>	R	x	x x	Uncommon RE (?) river area.
+	Little Grey Woodpecker <i>Dendropicos elachus</i>	R	x	x x x	Uncommon RE or RSV - WV. Up to 60 km north of Rosso.
+	Grey Woodpecker <i>Mesopicus goertae</i>	N R	x	x x x	RSV - WV (possibly RE) - Also noted Atar Dec.
-	Wryneck <i>Jynx torquilla</i>	N R	x	—	Common PM Nkt and river areas.

J F M A M J J A S O N D

+ Crested Lark <i>Galerida cristata</i>	N	Ubiquitous BR-RE Nkt area and all along coastal region from Banc and Akjoujt to Rosso (but not observed Nouadhibou).
+ Hoopoe Lark <i>Alaemon alaudipes</i>	N	Common RE Nkt area and north. Sings and displays throughout year. Usually solitary and often in areas empty or other birds. Observed up to 100 km north of Tidjikja and Tichit Aug-Feb. Also recorded Banc area and Adjoujt t. BR assumed.
Desert Lark <i>Ammomanes deserti</i>	M x	Only satisfactory record 1 bird ca. 80 km north of Tichit. Feb 74. Rare or missing in coastal region.
+ Bar-Tailed Desert Lark <i>A. cincturus</i>	N	Common RE Nkt area but subject to apparently erratic movements and sometimes virtually absent from Nkt area for periods up to 2 months. Also observed Banc.
+ Dunn's Lark <i>Eremalauda dunni</i>	N x x x x x	Uncommon Nkt area, usually in small numbers. Also seen by NM Atar area Dec.
+ Temminck's Horned Lark <i>Eremophila bilophia</i>	N	x x OV Nkt area. 4 several times Dec 72. 1 collected Oct 73.
- Short-Toed Lark <i>Calandrella brachydactyla</i>	M _____	PM and WV. Abundant Nkt area winter 1972-73 but very few winter 1973 - 4 after poor rains. Also noted river area, Akjoujt area and around Tichit. Single bird Nkt 2/7/74.
+ Lesser Short-Toed Lark <i>C. rufescens</i>	M x	x x x PM. Rare Nkt area Nov-Dec only. Numerous single birds and small groups moving south Banc area Nov. Flock of about 15 at Nouadhibou in April 1974.
+ Chestnut-Backed Finch-Lark <i>Eremopterix leucotis</i>	N R	x x Uncommon RSV Nkt. Common river area.

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+ White-Fronted Finch-Lark <i>E. nigriceps</i>	N — — — — —	BR. Abundant Nkt area winter 1972-3 after rains but absent winter 1973-4. — Nest found 80 km north of Rosso Sep 73.
Singing Bush Lark <i>Mirafra cantillans</i>	R x	Once near Rosso but reported to be common further east.
+ Kordofan Bush Lark <i>M. cordofanica</i>	R — — — — —	Found to date in only one area of reddish-brown sand with scattered bushes 50-60 km north of Rosso - fairly common and probably BR resident. Specimens taken in breeding condition. Courtship and distraction displays observed, but no nest found. 'Vagrant' in Senegal (Morel 1972).
European Swallow <i>Hirundo rustica</i>	N! — — — — —	PM Nkt area where seen almost daily - generally abundant. The one species seen commonly in interior desert, as well as all other areas visited.
Red-Rumped Swallow <i>H. daurica</i>	N — — — — —	Uncommon PM Nkt area.
- House Martin <i>Delichon urbica</i>	N — — — — —	PM Nkt usually in small numbers, most often close to beach.
Sand Martin <i>Riparia riparia</i>	N x x x — —	x x x x x x PM. Sometimes numerous but usually in small numbers. (Abundant PM and WV in nearby Senegal).
Pale Crag Martin <i>Ptyonoprogne obsoleta</i>	M — — — — —	RE in desert towns. Seen Tidjikja Aug-Dec. Uncommon WV (?) Nkt area.
Glossy-Backed Drongo <i>Dicrurus adsimilis</i>	R x	x Observed by NM 31/12/71 - 1/1/72 at marigot east of Rosso.
European Oriole <i>Oriolus oriolus</i>	N x x x x	Uncommon PM Nkt area.

Brown-Necked Raven <i>Corvus ruficollis</i>	N	RE. Numerous Nkt as well as Nonadhibou, Akjoujt, Tidjikja, Tichit. Also open desert and at oil camps 100-200 km north of Tichit. Not seen near river.				
Pied Crow <i>C. albus</i>	N	x	x	x		Common RE river area. North nearly to Nkt during summer months. Also RSV to Tidjikja.
Black Magpie <i>Ptilostomus afer</i>	R		x	x		RSV - in small numbers in vicinity of Borassus palms near Rosso 1974.
+ Tawny Babbler <i>Argya fulva</i>	M					BR. Has bred Nkt. Adults with young near Adjicoujt Nov. Fairly common but irregular as to any particular area. Seen near Tidjikja Aug.
Garden Bulbul <i>Pycnonotus barbatus</i>	N			x		OV Nkt. RSV or RE (?) river area. Not numerous
- Song Thrush <i>Turdus philomelos</i>	M				x	Two records. One bird NM garden Nov 73. One recently dead bird at desert oil exploration camp. Latitude 21°18'10"N - Longitude 07°04'S 30°W Nov 74.
Ring Ouzel <i>T. torquatus</i>	N	x				Two Jan 74 records Nkt - probably same bird.
Rock Thrush <i>Monticola saxatilis</i>	N			x	x	Two records - single male 24 km north of Nkt Oct 72, one female or imm. 10 km south Nkt 23/9/74.
Blue Rock Thrush <i>M. solitarius</i>	N					Fairly common but solitary late autumn PM and NW Nkt area. Seen by NM Atar area Dec.
+ Black Bush-Robin <i>Cercotrichas podobe</i>	R					Common RE river area.

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Rufous Rush-Robin <i>C. galactotes</i>	N	Common PM-WV and (?) RF Nkt and river area particularly immediately behind beach. Often noted singing as though on territory. Breeding suspected - seen feeding young in July.
+ Ant Chat <i>Myrmecocichla aethiops</i>	R	Probably local RE river area, moving north in rains.
European Wheatear <i>Oenanthe oenanthe</i>	N R	Common PM and scarce WV Nkt area. Begins moving north early Feb and majority move south through Nkt late in autumn. More common WV river. Race <u>seeboldii</u> - WV river area and PM Nkt area.
+ Isabelline Wheatear <i>O. isabellina</i>	N	Fairly common PM and WV Nkt area but generally solitary and keeps to areas with grass - much more common winter 1972-3 than 1973-4. Noted in river area Oct to Jan, at Ranc Nov, and about 50 km north of Tichit in Dec (in grassy area).
- Desert Wheatear <i>O. deserti</i>	N	Common WV Nkt area and north along coast to Nouadhibou. Not observed far south of Nkt city. Birds arrive late Sep Nkt area.
+ Spanish Wheatear <i>O. hispanica</i>	N R	Mainly winters in river area. Abundant PM and scarce WV Nkt area.
+ White-Crowned Black Wheatear M <i>O. leucopyga</i>	—	RF cliffs, rocky areas, desert towns such as Akjoujt and Tidjikja - Not observed in coastal region.
+ Whinchat <i>Saxicola rubetra</i>	N	PW Nkt area - at times abundant, also river area and Ranc.
- Redstart <i>Phoenicurus phoenicurus</i>	N	Abundant PW Nkt area. Observed Sep-Jan in river area.
Black Redstart <i>P. ochrurus</i>	N	Uncommon PM and WV Nkt area.

	J	F	M	A	M	J	J	A	S	O	N	D
+ Bluetroat <i>Luscinia svecica</i>	N				x	—						
Nightingale <i>L. megarhynchos</i>	N				x	x						
- Robin <i>Erithacus rubecula</i>	M					x						
- Grasshopper Warbler <i>Locustella naevia</i>	N	x				—						
Savi's Warbler <i>I. lusciniooides</i>	N					x	x	x				
+ Reed Warbler <i>Acrocephalus scirpaceus</i>	N		R		x	x	—					
Sedge Warbler <i>A. schoenobaenus</i>	N	x				x	x					
Aquatic Warbler <i>A. paludicola</i>	N					x						
Icterine Warbler <i>Hippolais icterina</i>	N					—	x					
+ Melodious Warbler <i>H. polyglotta</i>	N					—	—	—				
+ Olivaceous Warbler <i>H. pallida</i>	N	—	—			—	—	—				
+ Garden Warbler <i>Sylvia borin</i>	N	—	—			—	—	—				
Whitethroat <i>S. communis</i>	N	—	—			—	—	—				

Common PM Nkt area. Observed river area Oct and Banc Nov.

Uncommon PM Nkt - Observed 1972 only.

One record - dead bird at Cap Timiris 26/11/73.

Common PM Nkt area autumn. One Feb record in Nkt city.

Scarce PM Nkt area.

Common passage migrant autumn Nkt and river areas.

Not uncommon PM Sep at Nkt. One Feb record (18/2/74).

One record - a single bird near Nkt Sep 72.

Possibly should not include on this list without specimen but several sight records including 2 near Nkt 18/8/73.

Abundant PM, especially early autumn. Also common river area.

PM never numerous but commonly observed Nkt area. PM-W or possibly RE (?) river area.

PM Nkt area - usually not in large numbers but abundant autumn 1974.

PM Nkt area - not numerous. Noted river area Oct.

J F M A M J J A S O N D

+ Blackcap <i>S. atricapilla</i>	N	—	x	—	PM-WV Nkt area - numerous Feb-March. Noted river area Oct. Numerous Nov 73 at Banc - passing along coast and several landing on our boat offshore. Numerous Nkt Nov 74.
Sardinian Warbler <i>S. melanocephala</i>	N	—	x	x	Abundant late autumn PM and WV Nkt area. Noted river area Oct-Jan and Banc Nov.
+ Subalpine Warbler <i>S. cantillans</i>	N	—	x	x	Very common PM and uncommon WV Nkt. Abundant WV river area. Begins to move north in Feb. Late migrant in autumn.
+ Spectacled Warbler <i>S. conspicillata</i>	N	—	x	x	Common PM and WV Nkt area. Less abundant river area. Marked southward movement of imm. and/or females start mid-Sep with males following later. Noticeable influx spring-plumaged males and females Feb-March.
Orphean Warbler <i>S. hortensis</i>	N	—	x	x	Common WV river area. Uncommon PM Nkt area.
Tristam's Warbler <i>S. deserticola</i>	N	—	—	x	One sight record - 2 individuals near Nkt Oct 72.
- Willow Warbler <i>Phylloscopus trochilus</i>	N	—	—	x	Abundant PM Nkt area - earlier in autumn and later in spring than Chiffchaff. Also common river area.
- Chiffchaff <i>P. collybita</i>	N	—	—	x	Abundant PM and common WV Nkt area. Also numerous records river area. Also observed Banc and at desert camps in interior.
Bonelli's Warbler <i>P. bonelli</i>	N	—	—	x	PM Nkt area, common only in early autumn. Probable WV river area as well as PM. Abundant 60 km NO Rosso autumn 1974.
Wood Warbler <i>Phylloscopus sibilatrix</i>	N	—	x	—	PM. Two records only 22 and 24/9/74 about 15 km north Nkt.
+ Crombec <i>Sylvietta brachyura</i>	R	—	—	—	Probable BR-RE river area. Observed in Nkt area once in August.
+ Grey-Backed Flycatcher <i>Eremomela griseofava</i>	R	x	x	x	RE or RSV and WV river area - irregularly noted. Once at Nkt in Oct.

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Green-Backed Eremomela <i>E. pusilla</i>	R	x	x	x	x	Once 31/12/71-1/1/72 river area at marigot near Gani (NM).
Grey-Backed Camaroptera <i>Camaroptera brevicaudata</i>	R	x		x	x	RS-WV or RE(?) river area ~ seen up to 50 km north of Rosso but not commonly.
Pantanal Warbler <i>Cisticola juncidis</i>	R		x	x	x	Uncommon and local RSV(?) 1972-3 in grasslands Keur Massene Hunting Reserve (river area).
+ Desert Cisticola <i>Cisticola aridula</i>	R			x		RSV(?) . One record only 13/10/74 60 km north Rosso - imm.
+ Common Prinia <i>Prinia subflava</i>	R	—	—	—	—	Common RE river area.
+ Scaly-Fronted Warbler <i>P. clamans</i>	M	—	—	—	—	Local RE - rather common 50-80 km north of Rosso. Also in desert near and north of Tidjikja and Tichit. Calls like tinker-bird (<i>Pooecetes griseiceps</i>) but other calls very Prinia-like, including sharp ringing whistles and hard zzzzt alarm note.
+ Pied Flycatcher <i>Ficedula hypoleuca</i>	N	—	—	—	—	Common, often abundant, PM Nkt area; PM river area.
- Spotted Flycatcher <i>Muscicapa striata</i>	N	—	—	—	—	Common, often abundant, PM Nkt area; PM river area.
+ Senegal Puff-Back Flycatcher <i>Batis senegalensis</i>	R	—	—	—	—	Common RE(?) river area - but somewhat local.
- Yellow Wagtail <i>Motacilla flava</i>	M	—	x	x	x	BR Banc. PM Nkt area but somewhat irregular both as to occurrence and numbers. More regular PM and WV river area.
+ White Wagtail <i>M. alba</i>	N	—	—	—	—	Common WV Nkt area - ubiquitous in town, arriving 2nd half Sep, departing early Apr. Also river area, Banc, etc.
Grey Wagtail <i>M. cinerea</i>	M	—	—	x	x	PM Nkt area, regular but never numerous. One Zouerate Nov 74 with <u>M. alba</u> .
+ Tree Pipit	N	—	—	—	—	Common PM - Nkt area. Also river area.
+ Anthus trivialis						

J F M A M J J A S S O N D

Meadow Pipit <i>A. pratensis</i>	N	x x	x x x	Uncommon PM Nkt area.
+ Red-Throated Pipit <i>A. cervinus</i>	N	— x	—	Uncommon PM-WV Nkt area. Also Banc Nov and Nouadhibou Apr.
Tawny Pipit <i>A. campestris</i>	N	—	—	Common PM-WV Nkt area with numerous additional records river area Oct-Jan and Banc Nov. Tends to occur in grassy areas with Coursers, Isabelline Wheatears, etc. in winter. Relatively scarce 1973-74 after poor rains. Breeding suspected at Sebkha 15 km SW Nkt - birds carrying food July and Sep.
Richard's Pipit <i>A. richardi</i>	N	—	x	One record 3/10/71 Nkt (NM who knows bird well from Middle East).
Plain-Backed Pipit <i>A. leucophrys</i>	R	x	x	Probably RE river area but only a few records.
+ Great Grey Shrike <i>Lanius excubitor</i>	M	—	—	Fairly common RE mostly north of Nkt except in winter when numbers increase south towards river.
Red-Backed Shrike <i>L. collaris</i>	N	—	x x	Several females or imm. Nkt 4/9-3/10/71 by NM who knows bird well and is a careful observer (not <u>Isabellinus</u>).
+ Woodchat <i>L. senator</i>	N	—	—	PM Nkt area. PM and WV river area. Common. Often seen at desert drillsites and camps.
+ Gonolek <i>Laniarius barbarus</i>	R	x	—	Probably common RE river area in riparian "woodlands" which are inaccessible when river high and marshes flooded.
+ Brubru <i>Milvus afra</i>	R	—	x x	Common river area where probably resident - observed up to 80 km north of river in rainy season.
+ Black-Crowned Tchagra <i>Tchagra senegala</i>	R	—	—	Common RE up to 80 km north of river. Probably BR.

J F M A M J J A S O N D

	+ Blue-Eared Glossy Starling <i>Lamprocoelus chalybaeus</i>	N R	RSV-BR from river north to beyond Nkt -common.
+ Long-Tailed Glossy Starling	R —	—	Probably RE river area - fairly common only close to river.
+ Chestnut-Bellied Starling <i>Spreo pulcher</i>	R	—	Common RE river area.
+ Red-Billed Oxpecker <i>Buphagus africanus</i>	R	—	Common RE river area. Wanders north into Nkt area during rains.
+ Beautiful Sunbird <i>Nectarina pulchella</i>	R	—	Very common river area up to 100 km north in rains. Nest discovered 3/8/74 60 km north Rosso.
+ Pygmy Long-Tailed Sunbird <i>N. flatura</i>	R	x x	Non-breeding RSV in small numbers 50-60 km north Rosso. Easily overlooked and probably more common than present records indicated.
+ Scarlet-Chested Sunbird <i>N. senegalensis</i>	R	x	RSV - about 5 singing males in comparatively thick woodland near Rosso 3/8/74 just before rains made area inaccessible. No other records.
+ Ortolan Bunting <i>Emberiza hortulana</i>	N x	x	Common PM and scarce W(?) Nkt area. Also river area Oct-Nov.
Little Bunting <i>E. pusilla</i>	N x	x	NM garden 26/11/72, 16/12/72 and 8-11/3/73 - single individual each time. Presumably vagrant (NM).
Saharan House Bunting <i>E. striolata</i>	M x	x x	RE desert towns and escarpments.
+ Trumpeter Bullfinch <i>Rhodopechys githaginea</i>	N —	x x	Uncommon and local Nkt area. Dead bird picked up in desert 19/35°N 8°50'W Dec 73.
Linnet <i>Acanthis cannabina</i>	N x x	x	Uncommon winter visitor Nkt area, especially NM garden where ca. 11 birds Dec-Jan 1973-4. 2 NM garden early June 1971. Observed once frequent 100 km SO Nkt Jan.

	J	F	M	A	M	J	J	A	S	O	N	D
Yellow-Fronted Canary <i>Serinus mozambicus</i>	R			x								
+ Grey Canary <i>Polioptila leucopygia</i>	N	x	x	x	x	x	x					
Desert Sparrow <i>Passer simplex</i>	R	—										
Grey-Headed Sparrow <i>P. griseus</i>	M					x	x	x	x			
+ Yellow-Spotted Petronia <i>Petronia xanthosterna</i>	N	x	x	x	R	x	x	x	x			
Golden Sparrow <i>Auripasser luteus</i>	R	—	—	—	—							
+ White-Billed Buffalo Weaver <i>Bubalornis albirostris</i>	R	—	—	—	—	x	—	—	—			
Village Weaver <i>Ploceus cucullatus</i>	R	—	—	—	—	x	—	—	—			
+ Black-Headed Weaver <i>P. capitalis</i>	N	—	—	—	—	x	x	x	x	x		
+ Vitelline Weaver <i>P. vitellinus</i>	N	—	—	—	—	—	—	—	—	—		
Slender-Billed Weaver <i>P. luteola</i>	R	—	—	—	—	x	x	x	x	x		

One record Rosso Sep 72.

RE or RSV river area. OV Nkt (possibly augmented by escapes).

Observed in desert and rocky areas 80 km north of Nkt and near Tidjikja and Atar.

OV Nkt area, especially during rains. Undoubtedly resident river area but uncommon.

RSV probably BR - Pairs thinly but widely spread in thick acacia steppe 50-60 km north Rosso. Small parties in Oct probably pairs with young. Several females collected where in breeding condition in August. Distinctive "double-chip"-like Passer domesticus but doubled.

BR-RE - Often abundant but subject to erratic movements apparently connected with rainfall or lack of rainfall. Nests ca. 100 km SO Nkt autumn 1972.

BR river area up to about 80 km north of river in rainy season.

RSV-BR. Nesting at temporary pond at Keur Massene 80 km north or river in Oct 73. Not observed elsewhere.

RSV Nkt area. BR river area.

Very common BR river area. BR or RSV Nkt area, where common in good rain years.

RSV-uncommon to rare. Nesting 60 km NO Rosso 10/8/74.

	J	F	M	A	M	J	J	A	S	O	N	D
Orange Bishop <i>Buphagus oryzivorus</i>	N	x		x	x	x	x	x				OV - Nkt area (may be escaped cagebirds).
+ Napoleon Bishop <i>B. afra</i>	R					x	x					BR - river area.
Quelea <i>Quelea quelea</i>	M											RSV - usually in small numbers with flocks of <i>Auripasser luteus</i> north to Nkt.
Silverbill <i>Lonchura malabaricus</i>	N											OV Nkt area. More regular river area.
Cut-Throat Finch <i>Amadina fasciata</i>	R					x	x					Uncommon-river area.
+ Melba Finch <i>Ptytilia melba</i>	R	—										Local - probably BR-RE river area.
Orange-Cheeked Waxbill <i>Estrilda melpoda</i>	N		x			x	x	x				Probably escaped birds. Not observed river area.
Black-Rumped Waxbill <i>Estrilda troglodytes</i>	N			x		x	x	x				Up to 5 in NM garden in July 72. Not yet found river area. Escape or OV Nkt area.
Senegal Firefinch <i>Lagonosticta senegala</i>	R	—										RF river area - common.
Red-Cheeked Cordon-Bleu <i>Uraeginthus bengalus</i>	N	x	x				x					Common RE river area. OV Nkt area.
Quail Finch <i>Ortygospiza atricollis</i>	R	—					—					RSV-W or RE(?) river area. Also observed Nkt area Oct 1972 after good rains.
Combassou <i>Hypochera chalybeata</i>	R	—					—					RSV-W or RE(?) river area.
Pin-Tailed Whydah <i>Vidua macroura</i>	N						—					Rare RSV (possible escape) Nkt (NM).
+ Broad-Tailed Paradise Whydah <i>Steganurus orientalis</i>	R	—										Fairly common (and conspicuous in breeding plumage) RE or RSV-W river area. Also north to about 50 km from Nkt during rainy season.