



WATERBIRD CENSUS IN KHOR ABU HABIL INNER DELTA, BRIEF REPORT SUDAN (DECEMBER 2019)

International Waterbird Counts (IWC) were carried out from December 13 to 18 in the Khor Abu Habil Inner Delta together by WCGA, SWS, WRC & ONCFS¹ staff and partners, in the framework of the RESSOURCE Project coordinated by FAO. The rainfall has been abundant in the Nuba Mountains during the rainy season and a significant number of Mayaas were still well in water at this time, in particular in the South part of the Delta. As usual, the water bodies had been located through satellite imagery processing just before the field mission by Mrs Deschamps (Tour du Valat Research institute), see following figure.



Figure 1 : Khor Abu Habil Inner Delta: mayas counted in December 2019 (©Tour du Valat / ONCFS)

¹ WCGA : Wildlife Conservation General Administration. SWS : Sudanese Wildlife Society WRC : Wildlife Research Centre. TDV: Tour du Valat Research Institute, ONCFS : French Game and Wildlife Agency

Twenty-two "new" mayas were counted in this area, in particular in the part of the delta located south of the road linking Tendelti to Kosti.

RESULTS

Around 139,000 birds (59 waterbird species and 7 raptor species) were counted in 6 days in the area of Khor Abou Habil Inner Delta in December 2019 (see table 1). This area, which until now seemed difficult to access, has been covered for the first time this 2019/2020 winter and 6 mayas were home to more than 10,000 birds, out of which 2 supported more than 20,000 waterbirds (Ramsar Criterion 5, see Table 2).

Table 1 : Numbers of waterbirds and raptors counted in the KAH inner delta in December 2019. Species whose numbers exceed international importance thresholds are highlighted in yellow, see also table 3.

Species (English)	Latinname	Numbers
Abdim's Stork	<i>Ciconia abdimii</i>	150
African Comb Duck	<i>Sarkidiornis melanotos</i>	134
African Jacana	<i>Actophilornis africanus</i>	1
African Openbill	<i>Anastomus lamelligerus</i>	260
African Sacred Ibis	<i>Threskiornis aethiopicus</i>	31
Black Stork	<i>Ciconia nigra</i>	5
Black-headed Heron	<i>Ardea melanocephala</i>	30
Black-headed Lapwing	<i>Vanellus tectus</i>	8
Black-tailed Godwit	<i>Limosa limosa</i>	9377
Black-winged Stilt	<i>Himantopus himantopus</i>	5700
Cattle Egret	<i>Bubulcus ibis</i>	224
Collared Pratincole	<i>Glareola pratincola</i>	20477
Common Crane	<i>Grus grus</i>	2
Common Greenshank	<i>Tringa nebularia</i>	45
Common Gull-billed Tern	<i>Gelochelidon nilotica</i>	236
Common Moorhen	<i>Gallinula chloropus</i>	36
Common Pochard	<i>Aythya ferina</i>	10
Common Ringed Plover	<i>Charadrius hiaticula</i>	459
Common Sandpiper	<i>Actitis hypoleucos</i>	2
Common Snipe	<i>Gallinago gallinago</i>	6
Common Teal	<i>Anas crecca</i>	590
Coot spp.		3
Curlew Sandpiper	<i>Calidris ferruginea</i>	16
Demoiselle Crane	<i>Anthropoides virgo</i>	595
Eurasian Curlew	<i>Numenius arquata</i>	2
Eurasian Wigeon	<i>Mareca penelope</i>	2506
Fulvous Whistling-duck	<i>Dendrocygna bicolor</i>	51
Garganey	<i>Spatula querquedula</i>	53524
Glossy Ibis	<i>Plegadis falcinellus</i>	1763
Great White Egret	<i>Ardea alba</i>	33
Green Sandpiper	<i>Tringa ochropus</i>	5
Grey Heron	<i>Ardea cinerea</i>	305
Grey Plover	<i>Pluvialis squatarola</i>	1

Intermediate Egret	<i>Mesophoyx intermedia</i>	3
Kentish Plover	<i>Charadrius alexandrinus</i>	385
Kittlitz's Plover	<i>Charadrius pecuarius</i>	9
Lesser Black-backed Gull	<i>Larus fuscus</i>	1
Little Egret	<i>Egretta garzetta</i>	199
Little Grebe	<i>Tachybaptus ruficollis</i>	52
Little Ringed Plover	<i>Charadrius dubius</i>	1
Little Stint	<i>Calidris minuta</i>	3108
Long-tailed Cormorant	<i>Microcarbo africanus</i>	91
Marsh Sandpiper	<i>Tringa stagnatilis</i>	333
Northern Pintail	<i>Anas acuta</i>	16218
Northern Shoveler	<i>Spatula clypeata</i>	2501
Pied Avocet	<i>Recurvirostra avosetta</i>	1
Purple Heron	<i>Ardea purpurea</i>	6
Red-knobbed Coot	<i>Fulica cristata</i>	47
Ruff	<i>Calidris pugnax</i>	15562
Southern Pochard	<i>Netta erythrophthalma</i>	6
Spoonbill spp.	<i>Platalea spp.</i>	86
Spotted Redshank	<i>Tringa erythropus</i>	66
Spur-winged Lapwing	<i>Vanellus spinosus</i>	501
Squacco Heron	<i>Ardeola ralloides</i>	21
Temminck's Stint	<i>Calidris temminckii</i>	1
White Stork	<i>Ciconia ciconia</i>	511
White-faced Whistling-duck	<i>Dendrocygna viduata</i>	2170
White-tailed Lapwing	<i>Vanellus leucurus</i>	3
White-winged Tern	<i>Chlidonias leucopterus</i>	62
Wood Sandpiper	<i>Tringa glareola</i>	132
Total Waterbirds		138 663
Raptors		
Booted Eagle	<i>Hieraetus pennatus</i>	2
Harrier sp.		54
Montagu's Harrier	<i>Circus pygargus</i>	8
Osprey	<i>Pandion haliaetus</i>	3
Pallid Harrier	<i>Circus macrourus</i>	4
Rüppell's Vulture	<i>Gyps rueppelli</i>	2
Steppe eagle	<i>Aquila nipalensis</i>	17
Western Marsh-harrier	<i>Circus aeruginosus</i>	37

Table 2 : Species diversity and total birds counted per Maya in December 2019

(sites with more than 10 000 waterbirds are highlighted in Yellow).

Maya Name	Number of species recorded	Total birds counted
Al Berka Herar	17	4334
Assonta	23	16329
East Maya Abil	1	3
Hafir	3	80
Hafir 1	2	204

Hafir 2	2	70
Maya Abli	20	416
Maya Al Efen	9	147
Maya Am Timesi	12	1107
Maya As Seleea	17	29473
Maya as Sila	21	2873
Maya Asuda	3	85
Maya Kabb'a	24	28096
Maya Malaga Est	29	1134
Maya Malaga Ouest	11	10515
Maya North of Khayrat	20	16393
Maya North-East of Khayrat	2	5
Maya North-West of Khayrat	15	545
Maya Qawz el Ak	20	12119
Maya Saliman	12	200
Maya Tuwaiyil	16	2016
Maya Um Gawa	13	950
Maya West of Tamaleca	10	216
Mohoyum	18	524
Point Brousse	2	301
Safa	4	71
Shir Kala	25	5276
Tendelti Dam	31	3940
Um Gedehad	15	926
Umjob	11	476

The waterbird numbers counted in December 2019 greatly exceed the abundances of previous years (see figure 2). These numbers confirm the international importance of the area for waterbirds and its potential for declaration as a Ramsar site. Note on Figure 1 that only very partial counts have been made during 2011/2012 and 2013/2014 winters with only 2 and 4 mayaas counted respectively.



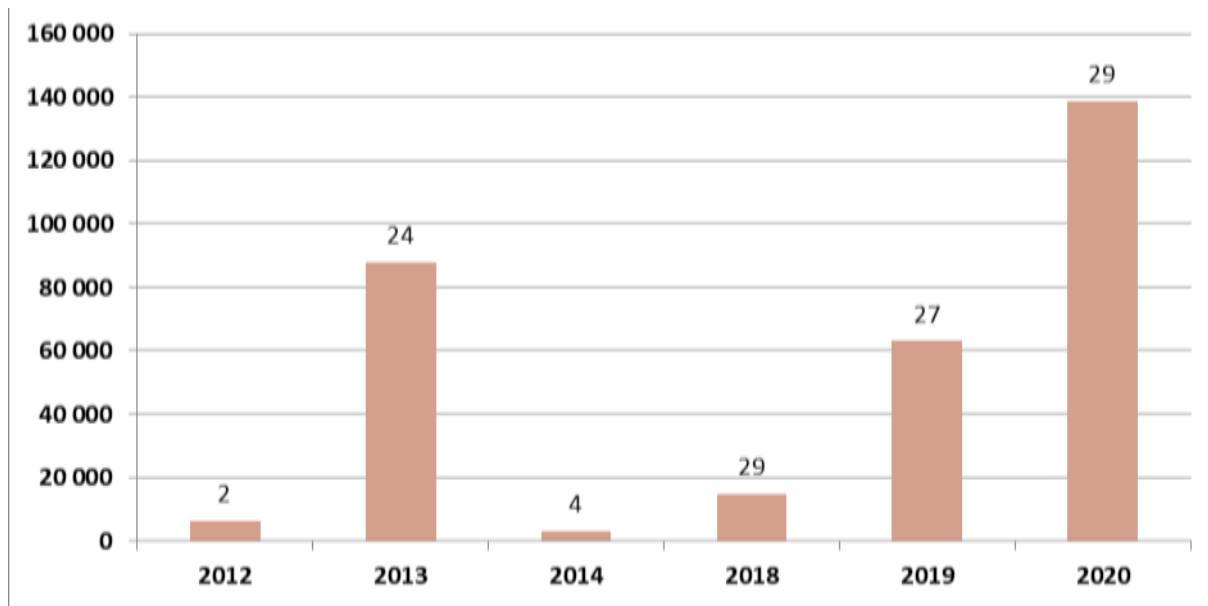


Figure 2 : Trends in waterbird numbers counted in the KAH since winter 2011/2012 until 2019/2020 with the number of visited sites. No count has been performed between 2015 and 2017. Source OFB / TDV / WCGA / SWS.

Table 3 below presents the species whose numbers counted in 2019 exceeded 1% of the related population (Criterion 6).

<i>Latin name/ English Name</i>	Numbers counted	1% of population	% counted	Population in consideration
<i>Anas acuta</i> /Pintail	16 218	7 000	2,32	Western Siberia/SW Asia & Eastern Africa
<i>Anthropoides virgo</i> /Demoiselle crane	595	570	1,04	Kalmykia/North-east Africa
<i>Glareola pratincola</i> /Collared Pratincole	20 477	1 000	20,48	<i>pratincola</i> (limbata), Red Sea
<i>Limosa limosa</i> /Black Tailed Godwit	9 377	1 200	7,81	<i>limosa</i> , Eastern Europe/Central & Eastern Africa
<i>Mareca penelope</i> /Wigeon	2 506	2 500	1,00	Western Siberia/SW Asia & NE Africa
<i>Plegadis falcinellus</i> /Glossy Ibis	1 763	1 000	1.76	South-west Asia/Eastern Africa
<i>Spatula querquedula</i> /Shoveler	53 524	1 400	38,23	Western Siberia/SW Asia, NE & Eastern Africa

Table 3 : Populations whose numbers counted in December 2019 in the KAH Inner Delta exceed the 1% threshold, meeting criterion 6 of the Ramsar convention.

Taking into account all IWC data available in the area, a delimitation of the "Ramsar" area, which would include the entire alluvial cone, could be proposed according to Criteria 1 of the Ramsar convention. However, a more restricted area, specific to birds criteria 5 & 6, could also be considered (see figure below).



Figure 3 : Map of the Khor Abu Habil area with the Ramsar criteria 1 then 5 & 6 zoning proposals.