

Waterbird Monitoring Programme in Kenya: January 2015 Census Report.

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Overview

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This bi-annual (January & July) waterbird census is part of an ongoing waterbirds and wetlands monitoring programme in Kenya since 1991 and organized by the National Museums of Kenya, Kenya Wildlife Service and Nature Kenya, among other partners. The activity largely relies on volunteer counters. It mainly focuses counting in five Rift Valley Lakes and other key national wetlands. The national coordination is conducted by the Ornithology Section at The National Museums of Kenya while other partners come in to provide crucial support, including funds, transport and on the ground logistics, as well as in several other ways.

The census involved 350 volunteer bird counters, counting birds at various wetland sites in the Rift Valley, Nairobi and Central region. This year, January counts were spread up to February. Some sites, especially the Coast- were not counted due to the prevailing insecurity situation in the country at the time. There were some delays due to financial constrains which forced the coordinators to postpone the exercise several times, hence pushing counts into February.

Nine sites were covered in the Rift Valley region during these counts. They include Lake Nakuru National Park, Njoro town Sewage, Nakuru town Sewage, Lake Bogoria National Reserve, Lakes Naivasha, Oloidien, Sonachi , Elmenteita and Magadi. In Nairobi region, the January counts were conducted at wetlands in Nairobi National

Park, Dandora sewerage treatment ponds, Kenyatta University sewerage treatment Ponds, Hillcrest dam and Brookside Dairy. In the Central region counts were conducted at Lake Ol' Bolossat, Manguo Ponds, Limuru Sewerage Ponds, Thika Sewerage treatment ponds and wetlands in Kinangop plateau.

A total of **87420** waterbirds of **110** species were recorded by a total of 350 volunteer counters during these counts. Rift Valley region recorded 69289 waterbirds of 109 this was the highest of waterbird numbers during the counts in the three regions. Waterbird numbers compared poorly with the January 2008 where 352995 waterbirds individuals of 104 species were recorded. The biggest decline is that of flamingos (222,589 individuals in January 2008). A total of 23980 individual flamingos were counted in Rift Valley Region.

Palearctic *Calidridinae* were the second most abundant waterbirds at the Rift Valley region at 8113, followed by, Commorants and Darter, 6782 and Herons and Egrets, 5446. In Nairobi region, Palearctic *Calidridinae* were the most abundant with 1640 waterbirds, followed by Afro-tropical Ducks & Geese with 908 waterbirds. In the Central region, Afro-tropical Ducks & Geese were the dominant group with 2981 waterbirds followed by Ibises & Spoonbills with 1982 waterbirds Detailed information on each region is provided in table 1 below.

Table 1: January/February 2015 waterbird counts summary for all sites covered

Species and sites	Rift Valley	Nairobi Region	Central Kenya	Totals
<i>Number of Volunteers</i>	240	70	40	350+
<i>Number of Species</i>	110	60	71	240
<i>Number of Waterbirds</i>	69,289	7,451	10,680	87,420
Flamingos	23,980			23,980
Dead Flamingos	4			4
Grebes	3,454	739	318	4,511
Pelicans	938		42	980
Cormorants & Darters	6,782	47	39	6,868
Heron & Egrets	5,446	171	434	6,051
Storks & Hamerkop	791	595	76	1,462
Ibises & Spoonbills	2,189	569	1,982	4,740
Afro-tropical Ducks & Geese	4,433	908	2,981	8,322
Palaeartic Ducks & Geese	809	2	254	1,065
Birds of Prey	319	9	32	360
Rails, Gallinules & Coots	826	473	1,077	2,376
Cranes	28	129	239	396
Jacanas	344	25	93	462
Stilts & Avocets	2,116	559	262	2,937
Coursers & Pratincoles		2	13	15
Afro-tropical <i>Charadriidae</i>	3,479	358	1,032	4,869
Palaeartic <i>Calidridinae</i>	8,113	1,640	987	10,740
Palaeartic <i>Charadriidae</i>	202	54	26	282
Palaeartic <i>Tringinae</i>	1,348	494	517	2,359
Gulls	1,828	1	4	1,833
Terns	1,448	662	213	2,323
Kingfishers	368	14	6	388
Skimmers	12			12
Snipes	32		4	36
Godwits			49	49

Regions and sites covered in January 2015

In January and February 2015, waterbird counts in the Rift Valley were conducted in eight wetlands: Lakes Nakuru, Naivasha, Sonachi, Oloidien, Bogoria, Nakuru Sewage Works, Njoro Sewage Ponds and Lake Magadi. A total of **69,289** waterbirds were recorded in these wetlands. Detailed information on each site is provided in tables 2 and 3 below.

Lake Oloidien: This is part of the main Lake Naivasha and is an alkaline lake. The lake was covered 100% by one group using a boat from 16:30-17:35hrs on 31st January 2015. The site had 979 waterbirds of 33 species, dominated by Egyptian Geese (600) and Great Cormorants (134).

Lake Sonachi: This is another satellite wetland of Lake Naivasha whose water is saline. This site was entirely covered by one group of eight counters from 16:45-17:44hrs

on 31st January 2015. 129 waterbirds of 10 species were recorded at this site with Little Grebe having the highest number of 94 individuals.

Lake Elmenteita: This is an alkaline lake designated as a Ramsar site and an Important Bird Area (IBA). It was also 100% covered on 31st January 2015 from 07:45-11:40hrs. Fourteen thousand one hundred (14,100) waterbirds of 66 species were recorded at this site. Flamingos were the largest group with 5,006 comprising of 4,332 Lesser Flamingos and 674 Greater Flamingos followed by Cape Teals (626), Little Grebes (504), Great Cormorants (475) and Egyptian Geese (465).

Lake Bogoria National Reserve: This is an alkaline lake designated as a Ramsar site and an IBA. Seventy five percent (75%) of the lake was covered due to high water level and poor access, counts begun at 0630-1000hrs on 7th February 2015. Thirteen thousand four hundred and eleven (**13,411**) waterbirds of 36 species were recorded. Flamingos being a total of 9,823 – 4,210 and 5,613 Greater Flamingos and Lesser Flamingos respectively. Three dead Flamingos were recorded.

Lake Nakuru National Park: This is an alkaline lake designated as a Ramsar site and an IBA. The Lake was covered 95% beginning at 0700-1130hrs on 8th February 2015. Eleven thousand six hundred and thirty (11,630) waterbirds of 64 species were recorded. 1,522 Flamingos (430 Lesser Flamingos and 1,092 Greater Flamingos) were recorded. Palaeartic *Calidridinae* was the dominant 3358 individuals followed by Cormorants and Darters, 1925 individuals. No dead flamingos were recorded on this lake.

Njoro Sewage Ponds: Ponds were covered from 0715-0810hrs on 8th February 2015 by six counters. The site had 1,410 waterbirds of 20 species. Afro-tropical Ducks & Geese were the most abundant (352 individuals), where Egyptian Geese had the highest individual numbers. Group of Ibises and

Spoonbills followed closely with 289 individuals.

Nakuru Town Sewage Works: The site is great for wintering Eurasian ducks. The ponds are properly managed hence feeding site for even buffalos and hippos. The treatment ponds were counted from 0830-0930hrs on 8th February 2015 by six counters (same counters who counted Njoro Sewage ponds). A total of 1,126 waterbirds of 36 species were recorded. Afro-tropical Ducks and Geese had the highest numbers with 469 individuals followed by Red-knobbed Coots (183).

Lake Naivasha (main Lake): This is a freshwater lake designated as Ramsar site and an IBA. The entire lake was covered by boats and the team walking along the riparian land from 0725-1230hr on 1st February 2015. The site had 13,356 waterbirds of 69 species. The dominant groups were the Cormorants (4,105), Herons and Egrets (4,036) while Ibises and Spoonbills had (1,771).

Lake Magadi: This alkaline lake and an IBA was 85% covered by counters due to heavy rain during the counts on 15th February 2015 from 0830-1130hrs, 13,162 waterbirds of 39 species were recorded at this site. Flamingos were the largest group with 7,626, (7,507 Lesser Flamingos, 119 Greater Flamingos, 1 dead Flamingo). In the records also were Chestnut-banded Plover (2,078) and Little Grebe (1,007).



Table 2: Summary of January 2015 waterbird counts in Rift Valley region.

Species and sites	L. Bogoria	L. Naivasha	L. Oloidien	L. Sonachi	L. Elementaita	L. Nakuru	L. Magadi	Njoro town Sewage	Nakuru town Sewage	Totals
<i>Number of Volunteers</i>	42	103	8	4	77	73	26	13	13	359
<i>Number of Species</i>	36	69	33	10	66	64	39	20	36	373
<i>Number of Waterbirds</i>	13,411	13,356	97	12	14,100	11,630	13,162	1,410	1,126	69,289
<i>Flamingos</i>	9,823	2	0	1	5,006	1,522	7,626	0	0	23,980
<i>Dead Flamingos</i>	3						1			4
Grebes	2,156	11	20	94	505	634			34	3,454
Pelicans	-	471	6	-	231	203	24		3	938
Cormorants & Darters	16	4,168	14	-	527	1,925	3	-	-	6,782
Heron & Egrets	6	4,036	49	5	549	604	174	7	16	5,446
Storks & Hamerkop	20	316	11	-	149	80	109	11	95	791
Ibises & Spoonbills	51	1,171	1	1	292	233	75	289	76	2,189
Afro-tropical Ducks & Geese	94	1,100	62	14	1,315	337	130	352	469	4,433
Palaeartic Ducks & Geese	1	4	6		359	296			143	809
Birds of Prey	3	277	6	1	4	25	2		1	319
Rails, Gallinules & Coots		326	16	1	44	200		55	184	826
Cranes		19			5	2			2	28
Jacanas		330			8				6	344
Stilts & Avocets	478	17			232	395	941	38	15	2116
Afro-tropical <i>Charadriidae</i>	72	381	18	-	343	414	2216	17	18	3479
Palaeartic <i>Calidridinae</i>	577	97	11	4	1,644	3,358	1,744	627	51	8,113
Palaeartic <i>Charadriidae</i>	13	3			79	90	17			202
Palaeartic <i>Tringinae</i>	91	133	10	8	297	733	55	12	9	1,348
Gulls		79	26		1,250	458	15			1,828
Terns	7	173	2	-	1,236	8	16	2	4	1,448
Kingfishers		238	25		18	87				368
Skimmers			7		5					12
Snipe		4			2	26				32

Table 3: January/February 2015 waterbird counts in Rift Valley region

Species and sites	L. Bogoria	L. Naivasha	L. Oloidien	L. Sonachi	L. Elementaita	L. Nakuru	L. Magadi	Sewage GP Njoro town Sewage	Nakuru town Sewage	TOTALS
Grebes										
Little Grebe	1,908	11	20	94	504	634			34	3,205
Black-necked Grebes	248									248
Great Crested Grebe					1					1
Sub-Totals	2,156	11	20	94	505	634			34	3,454
PELICANS										
Great White Pelican		436	5		223	190	20		2	876
Pink-backed Pelican		35	1		8	13	4		1	62
Sub-Totals	-	471	6	-	231	203	24		3	938
CORMORANTS & DARTERS										
African Darter		63				16				79
Reed Cormorant	7	2,356	9		52	134	3			2,561
Great Cormorant	9	1,749	134		475	1,775				4,142
Sub-Totals	16	4,168	143	-	527	1,925	3	-	-	6,782
HERONS & EGRETS										
Black-headed Heron	1	71			5	11			1	89
Cattle Egret	2	110			98	223	5	3	5	446
Common Squacco Heron		793	4		94	26	5			922
Great Egret		313	2	-	69	37	2		5	428
Grey Heron	2	437	26		85	80	18		5	653
Little Egret		105	15	5	88	112	122	4		451
Yellow-billed Egret	1	413	2		98	74				588
Striated Heron		1				6				7
Goliath Heron		7			1					8
Black-crowned Night Heron		55				35	13			103
Purple Heron		431			11					442
Dimorphic Egret							9			9
Unidentified Egret		800								800
Unidentified heron		500								500
Sub-Totals	6	4,036	49	5	549	604	174	7	16	5446
STORKS & HAMERKOP										
African Open-billed Stork						2				2
White Stork							18			18
Hamerkop	3	31				3			2	39
Marabou Stork		180				5	59	11	93	348
Yellow-billed Stork	17	102	11		149	70	32			381
Saddle-billed Stork		3								3
Sub-Totals	20	316	11	-	149	80	109	11	95	791
IBISES & SPOONBILLS										

Waterbird census, January 2015

African Spoonbill		106				112	64				282
Glossy Ibis					123	18			4		145
Hadada Ibis	27	328	1	1	7	33		25	14		436
Sacred Ibis	24	737			162	70	11	264	58		1326
Sub-Totals	51	1,171	1	1	292	233	75	289	76		2189
FLAMINGOS											
Greater Flamingo	4,210	2			674	1,092	119				6,097
Lesser Flamingo	5,613			1	4,332	430	7,507				17,883
Unidentified Flamingo	390										390
Dead Flamingo	3						1				4
Sub-Totals	10,216	2	0	1	5,006	1,522	7,627	0	0		24,374
DUCKS & GEESE											
Afro-tropical Ducks & Geese											
Cape Teal	71		14		626	50	123	1	6		891
Egyptian Goose	22	670	600	2	465	237		154	168		2,318
Spur-winged Goose		9				3					12
Fulvous Whistling Duck					2						2
Hottentot Teal		19	4		83	40	3	92	129		370
Red-billed Teal		20		7	72	4	4	48	57		212
Southern Pochard					1				42		43
Maccoa Duck				5							5
Yellow-billed Duck	1	370	4		44	3		8	67		497
White-faced Whistling Duck		9			17			49			75
Unidentified ducks		3			5						8
Sub-Totals	94	1,100	622	14	1,315	337	130	352	469		4433
Palaeartic Ducks & Geese											
Northern Pintail						115					115
Northern Shoveler	1	4			343	181					529
Garganey			6		16				143		165
Sub-Totals	1	4	6		359	296			143		809
BIRDS OF PREY											
African Fish Eagle	2	197	5	1	1	18					224
African Marsh Harrier		7				2					9
Eurasian Marsh Harrier	1	69	1		3	5	2		1		82
Osprey		4									4
Unidentified Eagle											
Sub-Totals	3	277	6	1	4	25	2		1		319
RAILS, GALLINULES & COOTS											
Black Crane		85	5	1	8	1					100
Common Moorhen		109	1		4	1			1		116
Purple Swampphen		17									17
Red-knobbed Coot		115	10		32	198		55	183		593
Sub-Totals		326	16	1	44	200		55	184		826

Waterbird census, January 20015

CRANES										
Grey Crowned Crane		19			5	2			2	28
JACANAS										
African Jacana		330			8				6	344
STILTS & AVOCETS										
Pied Avocet					17	17	306			340
Black-winged Stilt	478	17			215	378	635	38	15	1776
Sub-Totals	478	17			232	395	941	38	15	2116
PLOVERS & SANDPIPERS										
Afro-tropical Charadriidae										
Blacksmith Plover	2	151	17		208	254	130		5	767
Chestnut Banded Plover							2078			2078
Crowned Plover		3								3
Kittlitz's Plover	46				63	36	1			146
Long-toed Plover		115				2				117
Spur-winged Plover	20	112	1		11	62		17	13	236
Three-banded Plover	4				59	60	7			130
Unidentified Sandpiper					2					2
Sub-Totals	72	381	18	-	343	414	2216	17	18	3479
Palaeartic Calidridinae										
Curlew Sandpiper					24	1	28			53
Little Stint	276	3			870	1,749	1,007	1		3906
Ruff	301	94	11	4	750	1,608	709	626	51	4154
Sub-Totals	577	97	11	4	1,644	3,358	1,744	627	51	8113
Palaeartic Charadriidae										
Ringed Plover	13	3			79	89	17			201
Little Ringed Plover						1				1
Sub-Totals	13	3			79	90	17			202
Palaeartic Tringinae										
Common Greenshank		4		2	25	45	36			112
Common Sandpiper	3	75	8	6	141	418		8		659
Green Sandpiper	1	5			32	22			2	62
Marsh Sandpiper	7	15	2		26	46	9	3	4	112
Spotted Redshank	8				3	21				32
Wood Sandpiper	72	34			70	181	10	1	3	371
Sub-Totals	91	133	10	8	297	733	55	12	9	1348
GULLS										
Grey-headed Gull		79	26		1,250	458	15			1828
Sub-Totals		79	26		1,250	458	15			1828
TERNs										
Gull-billed Tern	6	15			46	3	2		1	73
Whiskered Tern	1	136	2		880	5	14	2	3	1043
White-winged Black Tern		22			310					332

Waterbird census, January 20015

Sub-Totals	7	173	2	-	1,236	8	16	2	4	1448
KINGFISHERS										
Giant Kingfisher		25								25
Malachite Kingfisher		25	1			2				28
Pied Kingfisher		188	24		18	85				315
Sub-Totals		238	25		18	87				368
SKIMMERS										
African Skimmer			7		5					12
SNIPE										
Common Snipe		4			2	26				32
Black-tailed Godwit		9								9

Waterbird Counts in Nairobi Region

The January 2015 Waterbird counts in Nairobi region were conducted in five sites – Kenyatta University (KU) Sewage Ponds, Dandora Sewage Works Nairobi National Park, Hillcrest dams and Brookside dam, Table 5 & 6.

Nairobi National Park: This is a protected area (National Park) and an IBA. The Park has such a richer bird species diversity of both terrestrial and waterbird. This is due to its diverse habitat types ranging from forests, rolling plains, bushland and savanna. The wetlands in this site were fully covered by a team of 32 counters from 1100-1350hrs on 14th January 2015. The small dams in the park combined had 802 waterbirds of 45 species of waterbirds. The dominant group was Storks and Hamerkop (327 individuals), Tables 5 & 6.

Dandora Oxygenated Ponds: This is an IBA site counted on 28th January 2015 by a team of 18 counters beginning 1034-1300hrs. The Ponds had a total of 5463 waterbirds of 43 species. Little Stint was the most abundant species with 1587 individuals, followed by Little Grebe with 651 individuals and Whiskered Tern with 511 individuals, Table 5 & 6 below.

Kenyatta University (KU) Oxygenated Ponds: This site was counted on 21st January

2015 by a team of 25 counters beginning 1025-1145hrs. The sewage Ponds had a total of 674 waterbirds of 40 species. The most abundant species was Black-winged Stilts (272) and Little Grebe (77 individuals), Tables 5 & 6.

Hillcrest Dam: This site was counted on 14th January 2015 by a team of 8 counters beginning 1010-1145hrs. Dam had a total of 35 waterbirds of 14 species. Tables 5 & 6 below

Brookside Dairy: This site was counted on 21st January 2015 by a team of 10 counters beginning 1020-1245hrs. Dam had a total of 34 waterbirds of 12 species. Tables 5 & 6 below

In summery, Sewerage treatment/oxygenated ponds play a very important role in providing suitable habitat to both the local and Eurasian migratory waterbirds. Their treatment is entirely natural and as the water goes through different ponds, there is change in water quality. This provides different micro habitats before it is finally discharged into the river system when it is clean. The gentle concrete slope provides feeding sites for wading birds, hence increasing species richness. Dondora oxygenated ponds had most population of waterbirds(Table 5) with a total of 10987 birds counted. This was followed by Thika Treatment Ponds with a total of 6339(Table 7) and Nairobi National Park with 1681 waterbirds.

Table 5: Summary of the January 2015 Waterbird families, counted in Nairobi Region

Species and sites	Kenyatta University sewage ponds	Dandora Sewage ponds	Nairobi National park	Brookside Dairy	Hillcrest Dam	Total
<i>Number of Volunteers</i>	25	18	32	12	8	95
<i>Number of Species</i>	40	43	45	34	14	176
<i>Number of Waterbirds</i>	674	5,463	802	477	35	7,451
Grebes	77	651	2		9	739
Pelicans						
Cormorants & Darters	15	9	14	5	4	47
Heron & Egrets	31	60	49	29	2	171
Storks & Hamerkop	31	233	327	1	3	595
Ibises & Spoonbills	23	372	122	50	2	569
Afro-tropical Ducks & Geese	42	703	82	75	6	908
Palearctic Ducks & Geese		2				2
Birds of Prey		5	3	1		9
Rails, Gallinules & Coots	8	417	8	33	7	473
Cranes		2	4	123		129
Jacanas	3	8	2	12		25
Painted Snipes						
Stilts & Avocets	272	241	8	38		559
Coursers & Pratincoles			2			2
Afro-tropical <i>Charadriidae</i>	39	237	56	26		358
Palearctic <i>Calidridinae</i>	18	1,587	8	27		1,640
Palearctic <i>Charadriidae</i>		54				54
Palearctic <i>Tringinae</i>	115	213	109	56	1	494
Gulls		1				1
Terns		661	1			662
Kingfishers		7	5	1	1	14
Grand Total	1413	10987	1681	1000	92	15173



Table 6: Results of the January 2015 species of waterbird counts in Nairobi region

Family, Species and sites	Kenyatta University sewage ponds	Dandora Sewage ponds	Nairobi National park	Brookside Dairy	Hillcrest Dam	Total
GREBES						
Little Grebe	77	651	2		9	739
<i>Sub-Totals</i>	<i>77</i>	<i>651</i>	<i>2</i>		<i>9</i>	<i>739</i>
PELICANS						
Pink-backed Pelican						
<i>Sub-Totals</i>	<i>77</i>	<i>651</i>	<i>2</i>		<i>9</i>	<i>739</i>
CORMORANTS & DARTER						
African Darter			3		1	4
Reed Cormorant	15	9	11	5	3	43
<i>Sub-Totals</i>	<i>15</i>	<i>9</i>	<i>14</i>	<i>5</i>	<i>4</i>	<i>47</i>
HERONS & EGRETS						
Black-headed Heron	1	2	20	2		25
Cattle Egret	15	24	8	12	1	60
Common Squacco Heron	1	10				11
Great Egret			1			1
Grey Heron	1	10	3	4		18
Little Egret		14				14
Yellow-billed Egret			3	5		8
Striated Heron					1	1
Black-crowned Night Heron	13		13	1		27
Purple Heron			1	5		6
<i>Sub-Totals</i>	<i>31</i>	<i>60</i>	<i>49</i>	<i>29</i>	<i>2</i>	<i>171</i>
STORKS & HAMERKOP						
White Stork			14			14
Hamerkop	2	1	1		1	5
Marabou Stork	28	228	310	1	2	569
Yellow-billed Stork	1	4	2			7
<i>Sub-Totals</i>	<i>31</i>	<i>233</i>	<i>327</i>	<i>1</i>	<i>3</i>	<i>595</i>
IBISES & SPOONBILLS						
African Spoonbill			11		1	12
Glossy Ibis	1	188		20		209
Hadada Ibis	10	8	2	9	1	30
Sacred Ibis	12	176	109	21		318
<i>Sub-Totals</i>	<i>23</i>	<i>372</i>	<i>122</i>	<i>50</i>	<i>2</i>	<i>569</i>
DUCKS & GEESE						
<i>Afro-tropical Ducks & Geese</i>						
Egyptian Goose	16	351	70	7		444

Spur-winged Goose		4	7	14		25
Fulvous Whistling Duck		120				120
Hottentot Teal		12		21		33
Red-billed Teal	2	16	4	12		34
White-faced Whistling Duck	24	196	1			221
Yellow-billed Duck				21	6	27
White-backed Duck		4				4
Sub-Totals	42	703	82	75	6	908
Garganey		2				2
Sub-Totals		2				2
BIRDS OF PREY						
African Fish Eagle			1	1		2
Eurasian Marsh Harrier		5	2			7
Sub-Totals		5	3	1		7
RAILS, GALLINULES & COOTS						
Black Crake		2	7	5	2	16
Common Moorhen			1	11	5	17
Purple Swamphen				5		5
Red-knobbed Coot	8	415		12		435
Sub-Totals	8	417	8	33	7	473
CRANES						
Grey Crowned Crane		2	4	123		129
JACANAS						
African Jacana	3	8	2	12		25
Common Snipe			7			7
Black-winged Stilt	272	241	8	38		559
Sub-Totals	275	249	17	50		591
COURSERS & PRATINCOLES						
Collared Pratincole			2			2
PLOVERS & SANDPIPERS						
<i>Afro-tropical Charadriidae</i>						
Blacksmith Plover	16	123	38	12		189
Kittlitz's Plover		45	4			49
Long-toed Plover		2	3			5
Spur-winged Plover	20	66	4	9		99
Three-banded Plover	3	1	7	5		16
Sub-Totals	39	237	56	26		358
<i>Palaeartic Calidridinae</i>						
Curlew Sandpiper			1			1
Little Stint		1,587	6			1,593
Ruff	18		1	27		46
Sub-Totals	18	1,587	8	27		1,640
<i>Palaeartic Charadriidae</i>						
Ringed Plover		54				54
Sub-Totals		54				54
<i>Palaeartic Tringinae</i>						

Common Greenshank	19	11	18			48
Common Sandpiper	39	68	8	10	1	126
Green Sandpiper	2	4	2	5		13
Marsh Sandpiper	15	9		2		26
Wood Sandpiper	40	121	81	39		281
Sub-Totals	115	213	109	56	1	494
GULLS						
Grey-headed Gull		1				1
Sub-Totals		1				1
TERNs						
Whiskered Tern		511				511
White-winged Black Tern		150	1			151
Sub-Totals		661	1			662
KINGFISHERS						
Malachite Kingfisher		7	5		1	13
Pied Kingfisher				1		1
Sub-Totals		7	5	1	1	14

Waterbird Counts in Central Region

Waterbird counts in January/February 2015 in Central region of Kenya were conducted in five wetland sites; Lake Ol' Bolossat, Thika Sewage Ponds, Kinangop wetlands, Limuru Sewage Ponds and Manguo Ponds, Tables 7 & 8.

Manguo Ponds: This site was covered from 1000-1150hrs on January 7, 2015 by a team of 14 counters. The site had a total of 619 waterbirds of 35 species. The dominant species was Red-billed Teal (127) and Ruff with 90 individuals.

Kinangop Wetlands: Five dams/wetlands were covered in Kinangop plateau (Kingori, Michinda, Gachiri, Mbae and Seminis Dams). These counts were conducted on 12th and 18th February 2015 these wetlands were 702 waterbirds of 40 species. The counts recorded 96 individual

Lake Ol'bolossat: This is a slightly alkaline. Lake designated as an IBA. 85% covered by 32 counters walking along the riparian land from 0743-1120hr on 15 February 2015. The site had 6151 waterbirds of 63 species. The dominant

Limuru Sewage Ponds: This site was covered starting 1030-1055hrs on January 7, 2015 by a team of 12 counters. The site had a total of 62 waterbirds of 32 species. The dominant groups were Ibises and **Spoonbills with 33 individuals**

Thika Sewage Ponds: This site was counted on 18th January 2015 between 1115-1330hrs. The site had 3,146 waterbirds of 47 species. The most abundant groups were Afro-tropical Ducks and Geese (795) and the Ibises & Spoonbills (541).

by a team of 10 counters starting 0715-1120hrs. Each dam was counted by two counters. The totals for

Northern Shovelers, 68 Cattle Egrets and 64 Egyptian Geese.

groups were the Afro-tropical Ducks and Geese (1,876) and the Ibises & Spoonbills (1,344), Table 7 & 8 below shows a summary of count results. A specific report (Wamiti *et al* 2015) is available on request.

Table 7: Summary of January February 2015 Waterbird counts in Central region

	L. Ol'bolessat	Thika Sewage Ponds	Kinangop Dams	Limuru ponds	Manguo ponds	Totals
<i>Number of Volunteers</i>						
<i>Number of Species</i>	63	47	40	32	35	217
<i>Number of Waterbirds</i>	6,151	3,146	702	62	619	10,680
Grebes	44	252	13		9	318
Pelicans	42					42
Cormorants & Darters	14	15	6		4	39
Heron & Egrets	236	89	88	1	20	434
Storks & Hamerkop	53	5	17	1		76
Ibises & Spoonbills	1,344	541	36	33	28	1,982
Afro-tropical Ducks & Geese	1,876	795	84		226	2,981
Palaeartic Ducks & Geese	44	111	99			254
Birds of Prey	29	1	1		1	32
Rails, Gallinules & Coots	900	34	48	1	94	1,077
Cranes	232		5		2	239
Jacanas	63	16			14	93
Stilts & Avocets	-	185	24		53	262
Coursers & Pratincoles	13					13
Afro-tropical <i>Charadriidae</i>	713	237	56	26		1,032
Palaeartic <i>Calidridinae</i>	294	495	57		141	987
Palaeartic <i>Charadriidae</i>	8	3	15			26
Palaeartic <i>Tringinae</i>	223	154	114		26	517
Gulls	3	1				4
Terns	3	210				213
Kingfishers	3	2			1	6
Snipes	16		7			23
Godwits	14		35			49
Grand total	12381	6339	1447	156	1273	21596

Table 8: January/February 2015 Waterbird counts in Central Region

Family, Species and sites	L. O'bolosat	Thika Sewage Ponds	Kinangop Dams	Limuru Ponds	Manguo ponds	Total
GREBES						
Little Grebe	44	252	13		9	318
<i>Sub-Totals</i>	44	252	13		9	318
PELICANS						
Great White Pelican	42					42
<i>Sub-Totals</i>	42					42
CORMORANTS & DARTER						
Reed Cormorant	14	15			4	33
Great Cormorant			6			6
<i>Sub-Totals</i>	14	15	6		4	39
HERONS & EGRETS						
Black-headed Heron	3	10	6		11	30
Cattle Egret	146	38	68		2	254
Common Squacco Heron	8				1	9
Great White Egret	15	4			1	20
Grey Heron	18	1	7		2	28
Little Egret	6	2				8
Yellow-billed Egret	29	6	6	1	3	45
Goliath Heron	3					3
Black-crowned Night Heron		28				28
Purple Heron	8		1			9
<i>Sub-Totals</i>	236	89	88	1	20	434
STORKS & HAMERKOP						
Saddle-billed Stork	2					2
Hamerkop	1	1	3	1		6
Marabou Stork		4				4
Yellow-billed Stork	50		14			64
<i>Sub-Totals</i>	53	5	17	1		76
IBISES & SPOONBILLS						
African Spoonbill	113		6		9	128
Glossy Ibis	265	15		9	9	298
Hadada Ibis	445	59	10	11	2	527
Sacred Ibis	521	467	20	13	8	1,029
<i>Sub-Totals</i>	1,344	541	36	33	28	1,982
DUCKS & GEESE						
<i>Afro-tropical Ducks & Geese</i>						
Cape Teal	4					4
Egyptian Goose	309	24	64		4	401
Spur-winged Goose	22					22
Fulvous Whistling Duck		5			1	6
Hottentot Teal	223	38	8		35	304
Red-billed Teal	453	598			127	1178
Southern Pochard		2				2
White-faced Whistling Duck	8	42				50
Maccoa Duck	4					4
Knob-billed Duck	12					12

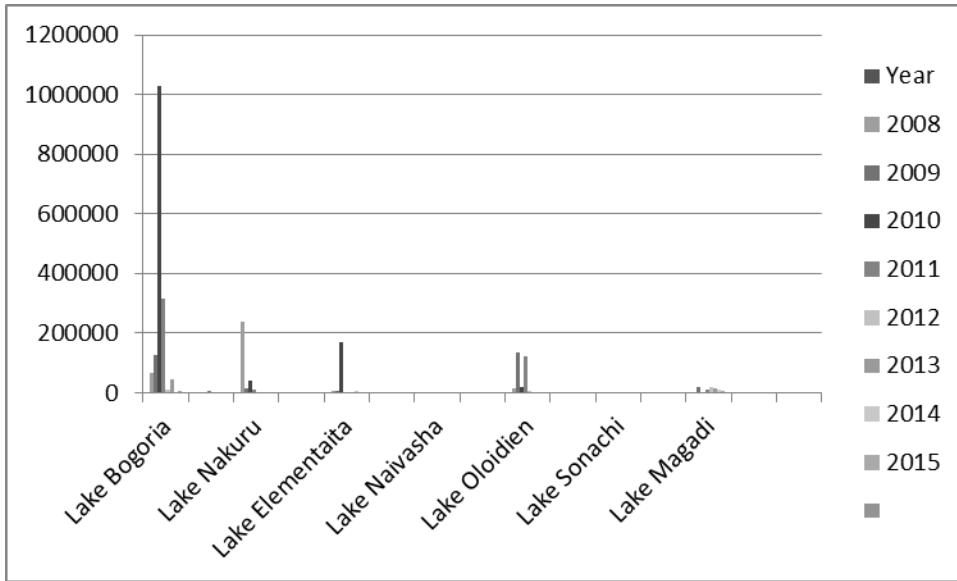
Yellow-billed Duck	839	86	8		59	992
White-backed Duck	2		4			6
Sub-Totals	1,876	795	84		226	2,981
<i>Palaeartic Ducks & Geese</i>						
<i>Northern Pintail</i>	6	2				8
Northern Shoveler	38	41	96			175
Garganey		68	3			71
Sub-Totals	44	111	99			254
BIRDS OF PREY						
African Fish Eagle	5					5
Eurasian Marsh Harrier	24	1	1		1	27
Sub-Totals	29	1	1		1	32
RAILS, GALLINULES & COOTS						
Black Crake	7	9		1	3	20
Common Moorhen	3	3	4		10	20
Purple Swamphen	3				1	4
Red-knobbed Coot	887	22	44		80	1,033
Sub-Totals	900	34	48	1	94	1,077
CRANES						
Grey Crowned Crane	232		5		2	239
JACANAS						
African Jacana	62	16			14	92
Lesser Jacana	1					1
Sub-Totals	63	16			14	93
STILTS & AVOCETS						
Black-winged Stilt		185	24		53	262
Sub-Totals		185	24		53	262
COURSERS & PRATINCOLES						
Collared Pratincole	13					13
PLOVERS & SANDPIPERS						
<i>Afro-tropical Charadriidae</i>						
Blacksmith Plover	588	25	56	2	19	690
Crowned Plover	2					2
Kittlitz's Plover	4		14			18
Long-toed Plover	46	28				74
Spur-winged Plover	53	87			5	145
Three-banded Plover	20	20	14		5	59
Sub-Totals	713	160	84	2		988
<i>Palaeartic Calidridinae</i>						
Curlew Sandpiper			7			7
Little Stint	39	432	25		51	547
Ruff	255	63	25		90	433
Sub-Totals	294	495	57		141	987
<i>Palaeartic Charadriidae</i>						
Ringed Plover	8	3				11
Little Ringed Plover			15			15
Sub-Totals	8	3	15			26
<i>Palaeartic Tringinae</i>						
Common Greenshank	9	3	14		4	30
Common Sandpiper	112	27	37		4	180
Green Sandpiper	4	4	5			13
Marsh Sandpiper	30	4	34		4	72
Spotted Redshank			12			12
Wood Sandpiper	68	116	12		14	210

Sub-Totals	223	154	114		26	517
GULLS						
Grey-headed Gull	3	1				4
Sub-Totals	3	1				4
TERNs						
Gull-billed Tern		11				11
Whiskered Tern	3	18				21
White-winged Black Tern		181				181
Sub-Totals	3	210				213
KINGFISHERS						
Giant Kingfisher	2					2
Malachite Kingfisher		2			1	3
Pied Kingfisher	1					1
Sub-Totals	3	2			1	6
SNIPE						
African Snipe	8		3			11
Common Snipe	8		4			12
Sub-Totals	16		7			23
Black-tailed Godwit	14		35			49

Table 9 Trends in flamingo numbers between 2008 and 2015

Year	Lake Bogoria		Lake Nakuru		Lake Elementaita		Lake Naivasha		Oloidien		Sonachi		Magadi	
	Lesser	Greater	Lesser	Greater	Lesser	Greater	Lesser	Greater	Lesser	Greater	Lesser	Greater	Lesser	Greater
2008	66727	3120	239958	1852	6091	823	0	0	16642	64	15	1		
2009	128515	1402	15340	2556	6325	3146	3	177	134521	1162	15	1	21482	117
2010	1030511	1392	41592	29	169125	1177	1	111	18519	376	X	X	X	X
2011	316390	5398	10168	4325	2190	2951	2	1	123630	856	X	X	11332	363
2012	9130	1061	110	478	127	72	20	0	5621	20	X	X	18299	33
2013	44926	1788	2212	1572	3100	1781	0	0	72	35	3	1	16358	233
2014	1028	244	4233	800	5381	166	3	0	130	5	41	2	12415	1409
2015	5613	4210	430	1092	4332	674	2	0	0	0	0	1	7507	119

X= missing data



Trends in Lesser Flamingos between the years 2008 and 2015

This report covers only the flamingos counted in January 2008 to January 2015. The Kenyan Rift Valley lakes are all very different and unique in bird population and species composition at any given time. The years 2009 to 2011 experienced the highest populations of lesser flamingos, with Lake Bogora having the population in 2010. The numbers of the lesser flamingos reduced significantly as from 2012. There was a slight pick in 2013 to 2015. The Lake Magadi is the most stable Lake for lesser flamingo population in the Kenya Rift lakes. It does not hold huge populations exceeding maximum of 20,000 of lesser flamingos and minimum not below 7500 flamingos. It experiences quite a narrow

fluctuation margins over years, except in 2015, when there was a sudden reduction in numbers of flamingos(7507 birds). The habitat and conditions are sounds and most suitable for lesser flamingos. Lake Nakuru and Bogoria can hold the most numbers of lesser flamingos when the conditions are favorable. Each can hold as much as 0.3 to One million lesser flamingos. However Nakuru is the most affected with reduced numbers immediately a change in water levels. For example a sudden increase in water levels will lead to a sudden drop to as less as 100 birds. The year 2011 experienced the highest population of the greater flamingos across The Rift Valley Lakes. Lake Bogoria, Naguru and Elementaita have the highest populations of greater flamingos

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