

Birdlife at Wadi Gaza and offshore, Gaza, 28 January–1 February 2003

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In early 2003 I visited Wadi Gaza, a small wetland centrally situated within the Gaza territory. I was there on behalf of MedWetCoast wetland conservation project (Goyet undated) to guide management planning for the Wadi, a newly designated protected area by the Palestine Authority. Wadi Gaza's new status prompted a range of environmental studies including a two-year bird survey, October 2002–September 2004, independent of my observations, by Abd Rabou *et al* (2007) which recorded 118 bird species. Their series of visits were intended to provide a baseline for the site. Additional data on the breeding birds were included in Al-Safadi (2006). My visit adds some winter observations. My observations for Wadi Gaza designated reserve spanned the four day period, 29 January–1 February 2003. Day one was allocated to 'familiarisation' which entailed a quick tour of the protected area in a 4WD vehicle, followed by meetings—leaving little scope for more than casual observations. Office work developing a draft management plan was scheduled for the next three days but fortunately my UNDP support officer was happy for us to arrive at dawn, giving us a couple of hours to walk the site before work began. We also took advantage of the lunch-time break for another hour of observation, followed by an hour to sunset at the end of the day.

The results of my daily observations for Wadi Gaza protected area are given in Table 1 in the form of maximum daily counts or estimates when accurate counts were not achieved. Birds seen offshore from Wadi Gaza, or from my hotel on 28 January, outside the reserve boundaries, are given in Table 2. My hotel room overlooked a small harbour and the sea on the edge of Gaza city. I had only twenty minutes before I was whisked away to a meeting but that was enough to establish considerable seabird activity offshore. These observations are presented in Table 2.

The Wadi Gaza wetland lies c12 km southwest of Gaza city. The water catchment of Wadi Gaza extends from the Negev mountains and Southern Heights of Hebron city some 105 km to the Mediterranean sea. My observations, however, were limited to the Wadi Gaza designated nature reserve, an area of 1313 ha at the coastal end of Wadi Gaza. The focal point of the reserve was a 25 ha lagoon into which ran a nearly dry river bed. Historical exchanges of water between lagoon and sea had all but halted, blocked by a small earth bar and foundations to a bridge supporting a coastal road. Seawards of the bar was a long, relatively narrow sandy beach. An area of soft mud was exposed at the northwestern corner of the lagoon. The rest had fringing vegetation mainly composed of Common Reed *Phragmites australis*. A wide expanse on its southern flank, in an area subject to occasional flooding, comprised a mosaic of open patches and dense *Nicotiana glauca* interspersed with *Tamarix* sp scrub. An access track divided this from a low embankment of mixed shrubs and rough grassland. The channel running into the lake held some water and was mainly fringed with *Arundo donax*. A stand of tall *Eucalyptus camaldulensis* had been planted north of the river channel and beyond was agricultural land.

I observed a total of 59 species in the Wadi Gaza designated reserve area (Table 1) and a further four offshore (Table 2). Twenty-one spp were additional to the list in Abd Rabou *et al* (2007); seventeen in the reserve and four offshore. My additions included Little Grebe, also noted by Al-Safadi (2006). This brings the recorded species total for Wadi Gaza designated reserve to 135; 139 if offshore observations from the reserve are taken into account.

Table 1. Daily bird observations (maximum daily counts or estimates where accurate counts were not achieved), Wadi Gaza designated protected area, 29 January–1 February 2003.

	29 Jan	30 Jan	31 Jan	1 Feb
Eurasian Teal <i>Anas crecca</i>	1	3	7	
Chukar <i>Alectoris chukar</i>			2	2
Little Grebe <i>Tachybaptus ruficollis</i>			2	3
Western Cattle Egret <i>Bubulcus ibis</i>	20	2		5
Little Egret <i>Egretta garzetta</i>	3	5	4	2
Great Cormorant <i>Phalacrocorax carbo</i>		1		2
Booted Eagle <i>Hieraaetus pennatus</i>	1			1
Eurasian Sparrowhawk <i>Accipiter nisus</i>	1	1		1
Western Marsh Harrier <i>Circus aeruginosus</i>	1			
Common Buzzard <i>Buteo buteo</i>				1
Water Rail <i>Rallus aquaticus</i>			5	2
Purple Swampphen <i>Porphyrio porphyrio</i>		2	1	1
Common Moorhen <i>Gallinula chloropus</i>	50	50	50	100
Eurasian Coot <i>Fulica atra</i>	30	30	30	50
Eurasian Stone-curlew <i>Burhinus oedinenus</i>		2		1
Black-winged Stilt <i>Himantopus himantopus</i>	1	1		
Spur-winged Lapwing <i>Vanellus spinosus</i>		20	50	50
European Golden Plover <i>Pluvialis apricaria</i>				1
Kentish Plover <i>Charadrius alexandrinus</i>	1			
Jack Snipe <i>Lymnocyrtus minimus</i>				1
Common Snipe <i>Gallinago gallinago</i>	8	20		20
Green Sandpiper <i>Tringa ochropus</i>			1	1
Common Redshank <i>Tringa totanus</i>	10	3		
Wood Sandpiper <i>Tringa glareola</i>			1	
Little Stint <i>Calidris minuta</i>	30			
Temminck's Stint <i>Calidris temminckii</i>				1
Black-headed Gull <i>Chroicocephalus ridibundus</i>				1
Little Gull <i>Hydrocoloeus minutus</i>	1	2		
Yellow-legged Gull <i>Larus michahellis</i>				2
Armenian Gull <i>Larus armenicus</i>				2
Lesser Black-backed Gull <i>Larus fuscus</i>				1
Laughing Dove <i>Streptopelia senegalensis</i>	10		20	25
White-throated Kingfisher <i>Halcyon smyrnensis</i>	1		3	2
Common Kingfisher <i>Alcedo atthis</i>	1			
Pied Kingfisher <i>Ceryle rudis</i>	2	2	2	2
Eurasian Hoopoe <i>Upupa epops</i>		1	1	3
Hooded Crow <i>Corvus corone cornix</i>		2	6	4
Great Tit <i>Parus major</i>				2
Eurasian Penduline Tit <i>Remiz pendulinus</i>	2	2	6	2
Crested Lark <i>Galerida cristata</i>	4	2	4	4
Eurasian Skylark <i>Alauda arvensis</i>	2	11		11
White-spectacled Bulbul <i>Pycnonotus xanthopygos</i>	20	12	20	20
Barn Swallow <i>Hirundo rustica</i>	3	3	4	6
Cetti's Warbler <i>Cettia cetti</i>	1			5
Common Chiffchaff <i>Phylloscopus collybita</i>	10	20	25	30
Graceful Prinia <i>Prinia gracilis</i>	20	30	30	30

	29 Jan	30 Jan	31 Jan	1 Feb
Sardinian Warbler <i>Sylvia melanocephala</i>		2		1
Song Thrush <i>Turdus philomelos</i>				3
European Robin <i>Erithacus rubecula</i>			1	2
Bluethroat <i>Luscinia svecica</i>		5	5	3
Western Black Redstart <i>Phoenicurus ochruros</i>				1
European Stonechat <i>Saxicola rubicola</i>				3
Palestine Sunbird <i>Cinnyris osea</i>			1	3
House Sparrow <i>Passer domesticus</i>	10	10	20	10
Spanish Sparrow <i>Passer hispaniolensis</i>				11
White Wagtail <i>Motacilla alba</i>	2	3	2	2
Meadow Pipit <i>Anthus pratensis</i>	2		5	4
Red-throated Pipit <i>Anthus cervinus</i>		1		
Common Chaffinch <i>Fringilla coelebs</i>	2	3	5	2

Table 2. Bird observations from coastal hotel, Gaza city, 28 January and offshore from Wadi Gaza, 29 January–1 February 2003. All concern birds outside the designated protected area. I recorded most species offshore as ‘present’ without noting numbers. Cormorants, Slender-billed and Yellow-legged Gulls were represented by all age groups. Some young Lesser Black-backed Gulls may have been present, undetected, amongst the larger immature gulls.

	28 Jan	29 Jan	30 Jan	31 Jan	1 Feb
Yelkouan Shearwater <i>Puffinus yelkouan</i>	20+	200			
Northern Gannet <i>Morus bassanus</i>		2			
Great Cormorant <i>Phalacrocorax carbo</i>		several		present	
Slender-billed Gull <i>Chroicocephalus genei</i>	several	present			
Lesser Black-backed Gull <i>Larus fuscus</i>	at least 2	present			
Armenian Gull <i>Larus armenicus</i>	4				
Yellow-legged Gull <i>Larus michahellis</i>	30+	present			
Sandwich Tern <i>Thalasseus sandvicensis</i>					1

SPECIES NOT INCLUDED IN ABD RABOU ET AL (2007)

Common Teal *Anas crecca*. Seen on three days (Table 1).

Yelkouan Shearwater *Puffinus yelkouan*. A movement was observed in the late afternoon of 29 January. Passage was already under way when I arrived and over the next half-hour I counted 200 following the coastline into a moderate southeast wind. Presumably the wind had driven them close to shore because from my elevated viewpoint many seemed to be flying virtually along the beach. This movement, though unexpected to me, is normal along east Mediterranean coasts at this time of year (Shirihai 1996); and the timing corresponds very closely with observations from the Bosphorus which, during systematic land-based counts conducted 2010–2015, revealed a consistent peak passage during the first week of February, involving many thousands of birds (Sahin 2016). Over twenty individuals were also seen flying some 100 m offshore from my coastal hotel on the outskirts of Gaza city on the afternoon of 28 January. All records of this species were offshore and not within Wadi Gaza reserve boundaries.

Gannet *Sula bassana*. Two birds in first-winter plumage were fishing offshore 29 January, just beyond the band of shearwaters. Not recorded within Wadi Gaza reserve boundaries.

Little Grebe *Tachybaptus ruficollis*. Seen on two days. Al-Safadi (2006) noted its presence in the lagoon of Wadi Gaza.

Booted Eagle *Hieraaetus pennatus*. A light phase individual was seen on two days, on each occasion going to roost in the line of *Eucalyptus* trees.

Eurasian Sparrowhawk *Accipiter nisus*. An adult female was seen on 29 January and what was probably the same adult male on two later days. Both were actively hunting.

Water Rail *Rallus aquaticus*. Not encountered until 31 January when some vocalisations were heard and five were counted feeding in full view on muddy edges of the wetland.

European Golden Plover *Pluvialis apricaria*. One flew over calling early on 1 February.

Temminck's Stint *Calidris temminckii*. A winter plumage bird was foraging in exposed mud at the coastal end of the lagoon on 1 February.

Wood Sandpiper *Tringa glareola*. One, foraging in exposed mud at the coastal end of the lagoon on 31 January.

Jack Snipe *Lymnocyptes minimus*. One flushed from our feet on the morning of 1 February from wet ground alongside the track. It flew a short distance, straight, lifting over the bushes before dropping into the scrub some 25 m away. The strongly patterned mantle and rich green and purple iridescence along with the poorly marked trailing edge to the wing were noted as it flushed.

Sandwich Tern *Thalasseus sandvicensis*. A winter plumage adult was foraging within 100 m of the shore on 1 February. Not recorded within Wadi Gaza reserve boundaries.

Slender-billed Gull *Chroicocephalus genei*. A winter adult flew leisurely south close to the Wadi Gaza shoreline 29 January. Several adults and first-winters were seen foraging offshore from my Wadi Gaza hotel 28 January. Not recorded within Wadi Gaza reserve boundaries.

Little Gull *Hydrocoloeus minutus*. One on 29 and two on 30 January were actively foraging over the open lagoon. They were first-winter birds.

Armenian Gull *Larus armenicus*. Two adults flew in from the sea and settled on the open mud on 1 February before flying out to sea again. Away from Wadi Gaza designated reserve two first-winters, based on size and structure, and two adults were present amongst a mêlée of large gulls in the harbour next to my accommodation 28 January.

Eurasian Penduline Tit *Remiz pendulinus*. Encountered every day. They were very vocal and easy to locate amongst the scrub.

Cetti's Warbler *Cettia cetti*. The characteristic chatter was heard 29 January but sightings eluded me until we ventured a little further inland along the channel running into the Wadi 1 February; a minimum of five amongst *Arundo donax* and on the ground.

Sardinian Warbler *Sylvia melanocephala*. Birds seen and vocalisations heard on two days. The male on 1 February was considered most likely to be *S. m. momus*.

Western Black Redstart *Phoenicurus ochruros*. A first-winter was seen amongst dumped rubble close to the channel in the interior part of the reserve 1 February.

Meadow Pipit *Anthus pratensis*. Seen on three days. The five, 31 January, may have been an underestimate. The preferred foraging habitat was wet open patches within the scrub area.

Red-throated Pipit *Anthus cervinus*. One in flight 30 January was located by its call. It may have dropped into the reserve but this was not established.

OTHER SELECTED SPECIES

Western Marsh Harrier *Circus aeruginosus*. A non-adult female quartered the site before heading to farmland 29 January.

Common Buzzard *Buteo buteo*. One circled the lagoon area before landing in a stand of trees 1 February. The bird showed characteristics of *B. b. buteo*.

Common Moorhen *Gallinula chloropus*. I was surprised at the density of moorhens. The reserve held considerable numbers, occupying the lagoon, its fringes, scrub and along the banks where the channel/river bed entered the lagoon.

Purple Swamphen *Porphyrio porphyrio*. A short burst of a raucous call 30 January prompted me to comment to my companion "if I was in the Albufera [a wetland in Mallorca, Spain] I would have called that a purple gallinule". Later that morning we saw two together, foraging calmly along the band of *Phragmites* fringing the lagoon on its north side. At least one was detected there on the subsequent two days. Colour tones of mantle and head corresponded with *P. p. madagascariensis*.

Common Coot *Fulica atra*. Good numbers were present on all days.

Black-winged Stilt *Himantopus himantopus*. A single bird favoured the exposed mud on two days.

Eurasian Stone-curlew *Burhinus oedicnemus*. Seen and heard shortly before dusk 30 January and 1 February in the drier terrain close to the *Eucalyptus* trees.

Spur-winged Lapwing *Vanellus spinosus*. A flock of 20, 30 January, frequented the area of exposed mud at the coastal end of the lagoon, increasing to 50 the following two days.

Kentish Plover *Charadrius alexandrinus*. An adult male occupied the sandier coastal fringe of the lagoon 29 January.

Little Stint *Calidris minuta*. A flock of 30 occupied the open mud 29 January but was not seen again.

Common Snipe *Gallinago gallinago*. The numbers recorded (Table 1) were of flushed birds. Entering the wet scrub area was the most effective way to find them and the counts will be well short of the numbers using the site.

Black-headed Gull *Chroicocephalus ridibundus*. A first-winter was present on and over the lagoon 1 February.

Lesser Black-backed Gull/Baltic Gull *Larus fuscus*. Single adults were seen offshore 29 January and, within the reserve, settled on the exposed mud 1 February. The intensity of colour tone on mantle and upper wing favoured one of the Baltic Gull *L. f. fuscus* complex, which is the default taxon expected in the eastern Mediterranean (Shirihai 1996, Olsen & Larsson 2004).

Yellow-legged Gull *Larus michahellis*. The only sighting in the reserve was two adults on the exposed mud 1 February. Up to 25, birds of all ages, were foraging offshore 29 January. Similar numbers were in and around the small harbour next to my accommodation 28 January.

Common Kingfisher *Alcedo atthis*. Not seen as we were obscured by the scrub, but the unmistakable piercing call was heard over the lagoon and disappearing landwards 29 January.

Pied Kingfisher *Ceryle rudis*. A pair was present, and conspicuous, 29 January–1 February.

White-breasted Kingfisher *Halcyon smyrnensis*. Observed on three days including an irruption of noise and ferocious chasing involving three individuals 31 January.

Palestine Sunbird *Cinnyris osea*. A male was seen 31 January and 3 on 1 February, all foraging through the Tamarisk scrub.

Skylark *Alauda arvensis*. Recorded on three days, with a flock of 11 feeding on open ground close to the *Eucalyptus* grove on two of them.

Northern Swallow *Hirundo rustica*. Northern Swallows were seen daily, foraging over the lagoon and more widely. They were all of the white-bellied form. Conditions were mild and there was abundant fly activity (including a small invasion from 31 January of the hoverfly *Eupeodes corollae* along with Painted Lady butterflies *Vanessa cardui* and Rush Veneer moths *Nomophila noctuella*, all classic migrants).

White-spectacled Bulbul *Pycnonotus xanthopygos*. Conspicuous.

Common Chiffchaff *Phylloscopus collybita*. One of the commonest species in the areas of scrub, and more widely, on all four days.

Graceful Warbler *Prinia gracilis*. Another particularly common and widespread species.

Bluethroat *Luscinia svecica*. Counts of up to 5 on three days were probably an underestimate as the birds were largely keeping within areas of scrub. Views were insufficient to establish race.

Spanish Sparrow *Passer hispaniolensis*. A flock of 11 descended noisily on a tamarisk bush close to the coastal road in the late afternoon of 1 February.

My primary reason for visiting the site was to assist the Wadi Gaza scientific and technical team in evaluation tasks towards the preparation of a conservation management plan under the auspices of the international MedWetCoast project (Goyet undated). My field observations were, therefore, not a comprehensive survey of the site and this explains some of the variations in daily counts or estimates (eg for Moorhen and Coot) and one-day omissions for some species which were clearly resident or winter residents at the site (eg Spur-winged Lapwing, Chukar, Meadow Pipit, Skylark). The two-year survey by Abd Rabou *et al* (2007) remains the main work of reference for the birds of Wadi Gaza. My observations are merely a snapshot in time, reflecting bird activity over a very short period of winter. They did, however, add 17 species to the site list. All were typical, in numbers and occurrence, for such a site and time of year with the exception of the Purple Swamphens. The record mirrors contemporary movements into the neighbouring country of Israel, including breeding (Perlman *et al* 2017).

Though collected in a quasi-systematic way, my counts for most species are likely to be underestimates of the numbers using the site. The main area of scrub was a particular challenge, not only for locating birds within and between the bushes but also because it acted as a screen to much of the lagoon area. Nevertheless my counts indicated the local value of the reserve and its habitats to a wide range of species, particularly the lagoon, exposed mud, scrub and wetland-fringing vegetation.

The main area of scrub was clearly supporting good numbers and diversity of birds. Tamarisk species are favoured by lepidopteran and dipteran communities (NJR, Martin Ebejer pers comm), providing an important food resource for passerines and others. The relatively small area of exposed mud at the coastal end of the lagoon was much frequented by waders; and on the final day two Yellow-legged, two Armenian and one Lesser Black-backed Gull used it as a resting area, settling there in full view to make my task of differentiating them that much easier. The daily presence of Swallows suggested a good supply of aerial insects, this hypothesis strengthened by an abundance of small bats active at and before dusk.

A major point of concern for conservation management was the physical state of the reserve. Water shortages meant that there was a reluctance to allow too much run-off of water to the sea. This led to 'stale' conditions, considerably exacerbated by unregulated release of cooking oil and other substances into the water to form a surface film against mosquitos. Despite these conditions, the reserve was still apparently providing the resources required to sustain a functioning wintering avifauna. The various wetland habitats within the site were favoured by waders, 12 species in the four days. The lagoon held Little Grebe, kingfishers and Little Gull—species exploiting the entire gamut of resources from underwater pursuit (the grebe), aerial-based targeting of prey items in the water (kingfishers) and picking items from the surface (the gull). A pair of Purple Swamphens appeared well established, and continued use of the reserve was indicated by records on five dates during the following autumn and winter (Abd Rabou *et al* 2007).

A site list of just 139 species is very low in a region of high bird diversity—*eg* c540 spp in neighbouring Israel (Perlman & Meyrav 2009). The list would rise considerably with regular watching but Wadi Gaza, limited in size and condition, can only play a minor role as a refuge and foraging site along a major migration flyway. However, there is no doubt that in 2003 Wadi Gaza was providing a range of habitats of local importance for a range of terrestrial and wetland birds despite the difficult conditions. The site afforded excellent birdwatching. In kinder times, it would certainly make a pleasant destination for visiting birders; perhaps even with families as the adjacent facilities of long sandy beach, high quality hotels and excellent local cuisine would make it a wonderful local resource for the development of ecotourism.

I have not been able to ascertain recent information about the condition of the Wadi Gaza designated protected area. However, there is clearly cause for concern, but optimism that the site can still be safeguarded for its wildlife and associated recreational value, as 'Wadi Gaza Coastal Wetlands' has been placed on the UNESCO World Heritage Site tentative list following nomination by the Palestine Authority in 2012 (<http://whc.unesco.org/en/tentativelists/5722/>).

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