



Supplementary Material

Avian Assemblage, Monitoring and Bioassessment of Margalla Hills National Park, Islamabad Capital Territory, Pakistan

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Supplementary Table I. Metrics used for the calculation of index of biotic integrity.

S. #	Scientific name	Common name	CS	HC	I	PT
1	<i>Accipiter badius</i>	Shikra	NE	HS	No	U
2	<i>Accipiter nisus</i>	Eurasian Sparrowhawk	LC	HS	No	S
3	<i>Acridotheres tristis</i>	Common myna	LC	HG	Yes	I
4	<i>Amandava amandava</i>	Red avadavat	NE	HS	No	U
5	<i>Apus apus</i>	Common swift	LC	HG	No	D
6	<i>Argya caudata</i>	Common babbler	LC	HG	No	S
7	<i>Athene brama</i>	Spotted owlet	LC	HG	No	S
8	<i>Bubulcus ibis</i>	Cattle egret	LC	HG	No	S
9	<i>Cacomantis passerinus</i>	Grey-bellied cuckoo	LC	HG	No	S
10	<i>Carpodacus rodochroa</i>	Pink-browed rosefinch	LC	HS	No	U
11	<i>Ceryle rudis</i>	Pied kingfisher	LC	HG	No	S
12	<i>Cinnyris asiaticus</i>	Purple sunbird	LC	HS	No	S
13	<i>Columba palumbus</i>	Common woodpigeon	LC	HS	No	I
14	<i>Copsychus saularis</i>	Oriental magpie robin	LC	HG	No	U
15	<i>Coracias benghalensis</i>	Indian roller	LC	HG	No	S
16	<i>Corvus splendens</i>	House crow	LC	HG	No	I
17	<i>Culicicapa ceylonensis</i>	Grey-headed canary-flycatcher	LC	HG	No	S
18	<i>Cyornis rubeculoides</i>	Blue-throated blue flycatcher	LC	HS	No	S
19	<i>Dendrocitta vagabunda</i>	Rufous treepie	LC	HG	Yes	I
20	<i>Dendrocopos macei</i>	Fulvous-breasted woodpecker	LC	HG	No	S

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S. #	Scientific name	Common name	CS	HC	I	PT
21	<i>Dicrurus macrocercus</i>	Black drongo	LC	HG	No	D
22	<i>Dinopium benghalense</i>	Black-rumped flameback	LC	HG	Yes	U
23	<i>Emberiza cia</i>	Rock bunting	LC	HG	Yes	I
24	<i>Emberiza lathami</i>	Crested bunting	LC	HG	No	S
25	<i>Emberiza leucocephalos</i>	Pine bunting	LC	HG	No	S
26	<i>Erythrogonys erythrogonys</i>	Rusty-cheeked scimitar-babbler	LC	HS	No	D
27	<i>Eudynamis scolopaceus</i>	Asian koel	NE	HG	No	U
28	<i>Ficedula parva</i>	Red-breasted flycatcher	LC	HG	No	S
29	<i>Francolinus francolinus</i>	Black francolin	LC	HG	No	U
30	<i>Francolinus pondicerianus</i>	Grey francolin	LC	HG	No	S
31	<i>Galerida cristata</i>	Crested lark	LC	HS	No	I
32	<i>Garrulus lanceolatus</i>	Black-headed jay	LC	HG	No	S
33	<i>Gracupica contra</i>	Asian pied starling	LC	HG	No	D
34	<i>Halcyon smyrnensis</i>	White-throated kingfisher	LC	HS	No	S
35	<i>Hierococcyx varius</i>	Common hawk-cuckoo	LC	HG	No	D
36	<i>Hirundo rustica</i>	Barn swallow	LC	HG	No	S
37	<i>Hypsipetes leucocephalus</i>	Black bulbul	LC	HS	No	S
38	<i>Lanius excubitor</i>	Great grey shrike	LC	HG	No	S
39	<i>Lanius schach</i>	Long-tailed shrike	LC	HG	No	S
40	<i>Leiopicus mahrattensis</i>	Yellow-crowned woodpecker	LC	HG	No	U
41	<i>Leiothrix lutea</i>	Red-billed leiothrix	LC	HG	No	S
42	<i>Lophura leucomelanos</i>	Kalij pheasant	LC	HG	No	S
43	<i>Merops philippinus</i>	Blue-tailed bee-eater	LC	HG	No	S
44	<i>Milvus migrans</i>	Black kite	LC	HS	No	S
45	<i>Monticola cinclorhyncha</i>	Blue-capped rock-thrush	LC	HG	No	S
46	<i>Motacilla alba</i>	White wagtail	LC	HG	No	S
47	<i>Myophonus caeruleus</i>	Blue whistling thrush	LC	HS	No	S
48	<i>Niltava sundara</i>	Rufous-bellied niltava	LC	HG	No	S
49	<i>Oenanthe fusca</i>	Brown rock chat	LC	HS	No	S
50	<i>Oriolus oriolus</i>	Eurasian golden oriole	LC	HG	No	S
51	<i>Orthotomus sutorius</i>	Common tailorbird	LC	HG	No	S
52	<i>Parus cinereus</i>	Cinereous tit	LC	HG	No	I
53	<i>Passer domesticus</i>	House sparrow	LC	HG	Yes	S
54	<i>Pericrocotus flammeus</i>	Orange minivet	LC	HS	No	D
55	<i>Phoenicurus coeruleocephala</i>	Blue-capped redstart	LC	HG	No	S
56	<i>Phoenicurus leucocephalus</i>	White-capped redstart	LC	HG	No	S
57	<i>Phylloscopus collybita</i>	Common chifchaff	LC	HS	No	S
58	<i>Phylloscopus xanthoschistos</i>	Grey-hooded warbler	LC	HG	No	S
59	<i>Picumnus innominatus</i>	Speckled piculet	NE	HS	No	U
60	<i>Picus squamatus</i>	Scaly-bellied woodpecker	LC	HS	No	S
61	<i>Ploceus philippinus</i>	Baya weaver	LC	HG	No	S

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S. #	Scientific name	Common name	CS	HC	I	PT
62	<i>Prinia gracilis</i>	Graceful prinia	LC	HG	No	S
63	<i>Prinia hodgsonii</i>	Grey-breasted prinia	LC	HG	No	D
64	<i>Prunella atrogularis</i>	Black-throated accentor	LC	HS	No	S
65	<i>Psilopogon asiaticus</i>	Blue-throated barbet	LC	HG	No	S
66	<i>Psittacula himalayana</i>	Slaty-headed parakeet	LC	HG	No	S
67	<i>Psittacula kramera</i>	Rose-ringed parakeet	LC	HG	No	I
68	<i>Pycnonotus cafer</i>	Red-vented bulbul	LC	HS	No	I
69	<i>Pycnonotus leucogenys</i>	Himalayan bulbul	LC	HG	No	S
70	<i>Rhipidura albicollis</i>	White-throated fantail	LC	HS	No	S
71	<i>Saxicola caprata</i>	Pied bush chat	LC	HG	No	D
72	<i>Saxicola ferreus</i>	Grey bush chat	LC	HG	No	S
73	<i>Saxicoloides fulicatus</i>	Indian robin	LC	HS	No	S
74	<i>Spilopelia chinensis</i>	Spotted dove	LC	HG	No	I
75	<i>Spilopelia senegalensis</i>	Laughing dove	LC	HS	No	D
76	<i>Streptopelia decaocto</i>	Eurasian collared dove	LC	HG	Yes	I
77	<i>Sturnia pagodarum</i>	Brahminy starling	LC	HS	No	U
78	<i>Terpsiphone paradise</i>	Indian paradise flycatcher	LC	HG	No	I
79	<i>Trochalopteron variegatum</i>	Variegated laughing thrush	NE	HS	No	U
80	<i>Turdoides striata</i>	Jungle babbler	LC	HG	No	I
81	<i>Upupa epops</i>	Eurasian hoopoe	LC	HS	No	S
82	<i>Urocissa flavirostris</i>	Yellow-billed blue magpie	LC	HS	No	S
83	<i>Zosterops palpebrosus</i>	Indian white-eye	LC	HG	No	S

IUCN conservation status (CS), Habitat category (HC), Status as Invasive elsewhere in the world (I), Global population trend (PT). LC, Least concern; NE, Not evaluated; HG, Habitat generalist; HS, Habitat specialist; I, Increasing; D, Decreasing; S, Stable; U, Unknown; Index of biotic integrity scoring criteria (IBI): Habitat Generalist (score 10) or Specialist (20); Least Concern (10) or Not-evaluated (20); Invasive (10), Non-invasive (20); Uncommon (encounter rate < 0.50, score 20) or Common (encounter rate > 0.50, score 10); Global population trend Stable or Increasing (10) or Decreasing (20).