**Appendix1. Bird species breeding in Hanma Wetlands**

| **NO.** | **Common name** | **Scientific Name** | **Residence type**(S: summer migrant; R: resident bird) |
| --- | --- | --- | --- |
| 1 | Upland Buzzard | *Buteo hemilasius* | R |
| 2 | Golden Eagle | *Aquila chrysaetos* | R |
| 3 | Black-billed Capercaillie | *Tetrao parvirostris* | R |
| 4 |  | *Bonasa bonasia* | R |
| 5 | Willow Grouse | *Lagopus lagopus* | R |
| 6 |  | *Perdix dauuricae* | R |
| 7 | Common Pheasant | *Phasianus colchicus* | R |
| 8 | Eurasian Eagle-owl | *Bubo bubo* | R |
| 9 | Ural Owl | *Strix uralensis* | R |
| 10 | Great Gray Owl | *Strix nebulosa* | R |
| 11 | Richardson's Owl | *Aegolius funereus* | R |
| 12 | Black Woodpecker | *Dryocopus martius* | R |
| 13 | Great Spotted Woodpecker | *Picoides major* | R |
| 14 | White-backed Woodpecker | *Picoides leucotos* | R |
| 15 | Lesser Spotted Woodpecker | *Picoides minor* | R |
| 16 | Alaska Three-toed Woodpecker | *Picoides tridactylus* | R |
| 17 | Jay | *Garrulus glandarius* | R |
| 18 | Azure-winged Magpie | *Cyanopica cyana* | R |
| 19 | Eurasian Nutcracker | *Nucifraga caryocatactes* | R |
| 20 | Carrion Crow | *Corvus corone* | R |
| 21 | Daurian Jackdaw | *Corvus dauuricus* | R |
| 22 | Siberian Jay | *Perisoreus infaustus* | R |
| 23 | Winter Wren | *Troglodytes troglodytes* | R |
| 24 | Long-tailed Tit | *Aegithalos caudatus* | R |
| 25 | Great Tit | *Parus major* | R |
| 26 | Coal Tit | *Parus ater* | R |
| 27 | Marsh Tit | *Parus palustris* | R |
| 28 | Willow Tit | *Parus montanus* | R |
| 29 | Eurasian Nuthatch | *Sitta europaea* | R |
| 30 | Tree Creeper | *Certhia familiaris* | R |
| 31 | Eurasian Tree Sparrow | *Passer montanus* | R |
| 32 | Gray-capped Greenfinch | *Carduelis sinica* | R |
| 33 | Red Crossbill | *Loxia curvirostra* | R |
| 34 | Long-tailed Rosefinch | *Uragus sibiricus* | R |
| 35 | Meadow Bunting | *Emberiza cioides* | R |
| 36 | Great Crested Grebe | *Podiceps cristatus* | S |
| 37 | Holboell's Grebe | *Podiceps grisegena* | S |
| 38 | Great Cormorant | *Phalacrocorax carbo* | S |
| 39 | Grey Heron | *Ardea cinerea* | S |
| 40 | Great Egret | *Egretta alba* | S |
| 41 | Schrenk's Little Bittern | *Ixobrychus eurhythmus* | S |
| 42 | Eurasian Bittern | *Botaurus stellaris* | S |
| 43 | Ruddy Shelduck | *Tadorna ferruginea* | S |
| 44 | Common Teal | *Anas crecca* | S |
| 45 | Falcated Duck | *Anas falcata* | S |
| 46 | Mallard | *Anas platyrhynchos* | S |
| 47 | Spotbill Duck | *Anas poecilorhyncha* | S |
| 48 | Gadwall | *Anas strepera* | S |
| 49 | Garganey | *Anas querquedula* | S |
| 50 | Northern Shoveler | *Anas clypeata* | S |
| 51 | Baer's Pochard | *Aythya baeri* | S |
| 52 | Tufted Duck | *Aythya fuligula* | S |
| 53 | Mandarin Duck | *Aix galericulata* | S |
| 54 | Common Goldeneye | *Bucephala clangula* | S |
| 55 | Common Merganser | *Mergus merganser* | S |
| 56 | Crested Honey-buzzard | *Pernis ptilorhynchus* | S |
| 57 | Goshawk | *Accipiter gentilis* | S |
| 58 | Eurasian Sparrow Hawk | *Accipiter nisus* | S |
| 59 | Besra Sparrow Hawk | *Accipiter virgatus* | S |
| 60 | Western Steppe-buzard | *Buteo buteo* | S |
| 61 | Greater Spotted Eagle | *Aquila clanga* | S |
| 62 | Gray Sea Eagle | *Haliaeetus albicilla* | S |
| 63 | Pied Harrier | *Circus melanoleucos* | S |
| 64 | Spotted Marsh-harrier | *Circus spilonotus* | S |
| 65 | Pandion haliaetus | *Western Osprey* | S |
| 66 | Peregrine Falcon | *Falco peregrinus* | S |
| 67 | Eurasian Hobby | *Falco subbuteo* | S |
| 68 | Common Kestrel | *Falco tinnunculus* | S |
| 69 | Yellow-legged Button-quail | *Turnix tanki* | S |
| 70 | European Crane | *Grus grus* | S |
| 71 | Demoiselle Crane | *Anthropoides virgo* | S |
| 72 | Water Rail | *Rallus aquaticus* | S |
| 73 | BaillonÌs Crake | *Porzana pusilla* | S |
| 74 | Eurasian Coot | *Fulica atra* | S |
| 75 | Common Ringed Plover | *Charadrius hiaticula* | S |
| 76 | Little Ringed Plover | *Charadrius dubius* | S |
| 77 | Oriental Plover | *Charadrius veredus* | S |
| 78 | Far Eastern Curlew | *Numenius madagascariensis* | S |
| 79 | Spotted Redshank | *Tringa erythropus* | S |
| 80 | Wood Sandpiper | *Tringa glareola* | S |
| 81 | Common Sandpiper | *Tringa hypoleucos* | S |
| 82 |  | *Gallinago solitaria* | S |
| 83 | Oriental Pratincole | *Glareola maldivarum* | S |
| 84 | Black-headed Gull | *Larus ridibundus* | S |
| 85 | White-winged Black Tern | *Chlidonias leucoptera* | S |
| 86 | Common Tern | *Sterna hirundo* | S |
| 87 | Eastern Rock Pigeon | *Columba rupestris* | S |
| 88 | Oriental Turtle Dove | *Streptopelia orientalis* | S |
| 89 | Short-winged Cuckoo | *Cuculus micropterus* | S |
| 90 | Common Cuckoo | *Cuculus canorus* | S |
| 91 | Himalayan Cuckoo | *Cuculus saturatus* | S |
| 92 | Long-eared Owl | *Asio otus* | S |
| 93 | Grey Nightjar | *Caprimulgus indicus* | S |
| 94 | White-throated Needletail Swift | *Hirundapus caudacutus* | S |
| 95 | Pacific Swift | *Apus pacificus* | S |
| 96 | Kingfisher | *Alcedo atthis* | S |
| 97 | Eurasian Hoopoe | *Upupa epops* | S |
| 98 | Eurasian Wryneck | *Jynx torquilla* | S |
| 99 | Short-toed Lark | *Calandrella cinerea* | S |
| 100 | Skylark | *Alauda arvensis* | S |
| 101 | Grey Wagtail | *Motacilla cinerea* | S |
| 102 | Red-rumped Swallow | *Hirundo daurica* | S |
| 103 |  | *Delichon urbica* | S |
| 104 | Citrine Wagtail | *Motacilla citreola* | S |
| 105 | Grey Wagtail | *Motacilla cinerea* | S |
| 106 | White Wagtail | *Motacilla alba* | S |
| 107 | Olive-backed Pipit | *Anthus hodgsoni* | S |
| 108 | Ashy Minivet | *Pericrocotus divaricatus* | S |
| 109 | Red-backed Shrike | *Lanius collurio* | S |
| 110 | Northern Shrike | *Lanius excubitor* | S |
| 111 | Grey Starling | *Sturnus cineraceus* | S |
| 112 | Purple-backed Starling | *Sturnus sturninus* | S |
| 113 | Alpine Accentor | *Prunella collaris* | S |
| 114 | Rufous-tailed Robin | *Luscinia sibilans* | S |
| 115 | Kamchatka Nightingale | *Luscinia calliope* | S |
| 116 | Bluethroat Redpoll | *Luscinia svecica* | S |
| 117 | Siberian Blue Robin | *Luscinia cyane* | S |
| 118 | Red-flanked Bluetail | *Tarsiger cyanurus* | S |
| 119 | Daurian Redstart | *Phoenicurus auroreus* | S |
| 120 | African Stonechat | *Saxicola torquata* | S |
| 121 | Grey-backed Thrush | *Turdus hortulorum* | S |
| 122 | Siberian Thrush | *Zoothera sibirica* | S |
| 123 | White's Thrush | *Zoothera dauma* | S |
| 124 | Gray's Warbler | *Locustella fasciolata* | S |
| 125 | Oriental Reed Warbler | *Acrocephalus orientalis* | S |
| 126 | Black-browed Reed Warbler | *Acrocephalus bistrigiceps* | S |
| 127 | Thick-billed Warbler | *Acrocephalus aedon* | S |
| 128 | Dusky Warbler | *Phylloscopus fuscatus* | S |
| 129 | Radde's Warbler | *Phylloscopus schwarzi* | S |
| 130 | Hume's Yellow-browed Warbler | *Phylloscopus inornatus* | S |
| 131 | Pallas Warbler | *Phylloscopus proregulus* | S |
| 132 | Two-barred Warbler | *Phylloscopus plumbeitarsus* | S |
| 133 | Yellow-rumped Flycatcher | *Ficedula zanthopygia* | S |
| 134 | Black-and-orange Flycatcher | *Ficedula mugimaki* | S |
| 135 | Red-throated Flycatcher | *Ficedula parva* | S |
| 136 | Dark-sided Flycatcher | *Muscicapa sibirica* | S |
| 137 | Gray-streaked Flycatcher | *Muscicapa griseisticta* | S |
| 138 | Asian Brown Flycatcher | *Muscicapa latirostris* | S |
| 139 | Siskin | *Carduelis spinus* | S |
| 140 | Scarlet Rosefinch | *Carpodacus erythrinus* | S |
| 141 | Black-tailed Hawfinch | *Eophona migratoria* | S |
| 142 | Hawfinch | *Coccothraustes coccothraustes* | S |
| 143 | Pine Bunting | *Emberiza leucocephala* | S |
| 144 | Chestnut Bunting | *Emberiza rutila* | S |
| 145 | Yellow-breasted Bunting | *Emberiza aureola* | S |
| 146 | Yellow-throated Bunting | *Emberiza elegans* | S |
| 147 | Black-faced Bunting | *Emberiza spodocephala* | S |
| 148 | Grey-hooded Bunting | *Emberiza fucata* | S |
| 149 | Pallas's Reed Bunting | *Emberiza pallasi* | S |