



WETLAND BIRDS OF HARYANA

WETLAND BIRDS OF HARYANA

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Luscinia svecica



Forests & Wildlife Department, Haryana

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People say you can't make a living from bird watching. That's perhaps true, but, it is also true that man does not live by bread alone. Just look at the people who have no such hobbies and spend all their time solely on earning a living. After 60, when they retire from official chair, they don't know what to do with all the time in their hands and just spend it watching the clock. If they had cultivated a hobby like bird watching, perhaps they would have lived longer to enjoy their pension.

”

Dr. Salim Ali
Ornithologist

“

The bird has an honor that man does not have. Man lives in the traps of his abdicated laws and traditions; but the birds live according to the natural law of God who causes the earth to turn around the sun.

”

Khalil Gibran



WETLAND BIRDS OF HARYANA

Forests & Wildlife Department, Haryana

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Dalmatian pelican
Pelecanus crispus



मनोहर लाल
MANOHAR LAL



मुख्य मन्त्री, हरियाणा, चण्डीगढ़
CHIEF MINISTER, HARYANA, CHANDIGARH

MESSAGE

Birds are an important component of the natural ecosystems. They add welcome dimensions of colour and sound to our lives. A mere sighting of a flock of birds soaring above the firmament offers us a typical sense of joy.

Birds are recognized as important indicators of the state of the environment. Changes in bird population and/or species composition is often considered as the first indication of environmental change. Health of ecosystems can be directly correlated with the health of birds.

Out of about 1350 bird species known to exist in India, about 650 are found in Haryana. It has been reported that out of these about 40 are globally threatened. Haryana is alive to its responsibilities in

conserving its bird population and has been making steady efforts in that direction.

Conservation of wetlands in various parts of Haryana has played a major role in providing sustainable habitat to various types of birds, including but not restricted to, migratory birds that wing their way into India from various parts of the world.

I am pleased to note that the Haryana Forest Department has come out with “Wetland Birds of Haryana”. I am confident that this will give a welcome boost to our efforts to create a broader constituency of support for our initiatives to protect our ornithological wealth.

I would like to place on record my appreciation for the efforts of the entire team behind this publication.



Sarus crane
Grus antigone



कंवर पाल
KANWAR PAL



शिक्षा, वन, पर्यटन, संसदीय कार्य, कला और सांस्कृतिक
मामलों और आतिथ्य मंत्री, हरियाणा
**EDUCATION, FORESTS, TOURISM,
PARLIAMENTARY AFFAIRS, ART & CULTURAL
AFFAIRS AND HOSPITALITY MINISTER,
HARYANA**

MESSAGE

With its flat terrain, low natural forest cover and high intensity agricultural ecosystem, Haryana is a surprise in terms of the diversity of bird species that it plays host to. Conservation of wetlands is key to promoting bird populations in the region.

In a boost to the efforts of Haryana Forest & Wildlife Department to strengthen bird habitat management the Ministry of Environment Forest & Climate Change, Govt. of India has recently recognized two wetlands of Haryana namely Bhindawas Wildlife Sanctuary and Sultanpur National Park as wetlands of international importance under the Ramsar Convention.

Bhindawas Wildlife Sanctuary is a man-made freshwater wetland. It is the largest wetland in Haryana. More than 250 species of birds use this sanctuary as a resting place throughout the year. The site is home to more than 10 globally threatened species, including the Egyptian Vulture, Steppe Eagle, Pallas's Fish Eagle and Black-bellied Tern. Sultanpur National Park is home to more than 220

species of native birds, winter migrants and local migratory waterfowl at critical stages of their life cycle. More than 10 of these species fall into the globally endangered category.

The Govt. of Haryana is striving hard to enhance Haryana's status as a sustainable bird habitat. However, success of efforts of various agencies engaged in this onerous task is also dependent on securing public support and cooperation of the general public. Spreading awareness of the role of birds in the larger ecological scheme is critical in this context.

I am pleased that the Haryana Forest and Wildlife Department has come out with the publication Wetland Birds of Haryana. This is a timely effort as it coincides with the recognition of Haryana wetlands under the Ramsar Convention.

I commend the efforts made by various individuals to make this publication happen and hope that there shall be more such efforts in the future.



Bar headed goose
Anser indicus



ए. के. सिंह
A. K. SINGH, IAS



अपर मुख्य सचिव वन एवं वन्य जीव विभाग
हरियाणा
Additional Chief Secretary,
Department of Forest and Wildlife, Haryana

MESSAGE

No matter where we are on the planet, one creature that we are sure to sight will be a bird. Due to their visibility and ubiquitous presence, humans have had a special relationship with them since the origins of humanity. No wonder Birds have a special and diverse presence in various roles in religion and mythology. Birds have also featured in culture and art since prehistoric times as is evident from their depiction in cave paintings discovered across the world.

Despite their ability to fly and escape danger easily, many bird populations are declining worldwide. It has been reported that more than 1200 species of birds are listed as threatened by various reputed watchdog institutions. The primary cause of this existential threat is loss of habitat stemming out of anthropogenic causes. Other threats include overhunting, accidental mortality, competition and predation for non native species, and climate change.

As a society, we need urgent action to stem the negative trend of loss of bird habitats. Conservation of wetlands is an important

component of such efforts. Haryana has been at the forefront of augmenting bird habitat zones. Inclusion of two of Haryana's protected areas in the list of Ramsar sites is a notable recognition of such efforts. Haryana's wetlands provide more than 400 local and migratory species at various points in time of the year.

I am glad that the publication "Wetland Birds of Haryana" is being brought out by Haryana Forest and Wildlife Department. Such knowledge products are critical tools in the mission to ensure that battles of nature conservation are fought not only in corridors of power or in laboratories of science, but also in the minds of the people. I am sure that this publication is a small endeavour yet important step to create public support for conservation measures of all natural resources, including birds.

I wish the publication good success and convey my greetings to those who conceptualized and executed it.



Northern pintail
Anas acuta



जगदीश चंद्र
JAGDISH CHANDER, IFS



प्रधान मुख्य वन संरक्षक
हरियाणा
Principal Chief Conservator of Forests
Haryana

MESSAGE

It is a matter of great privilege and it brings me immense pleasure to present this very beautiful Coffee Table Book on 'Wetland Birds of Haryana'. Wetlands are unique productive ecological systems where terrestrial and aquatic habitats meet. Wetlands are ecotones (transition zones) between terrestrial and aquatic environments. No doubt they make up a myriad of landforms that are either inundated or saturated by water, part or all of the year, and support specialist plants and animals adapted to live under such conditions.

They are Mother Nature's kidneys and the 'kidneys of the landscapes' as they filter, store, assimilate and transform contaminants lost from the landscapes before they finally reach waterways. They are Mother Nature's sponges and regulate stream flow by absorbing water during wet season and slowly releasing it during dry period. They are Mother Nature's filters as they trap sediments through their vegetation-thereby reducing run off velocity of water. They attenuate floods by spreading out and slowing down floodwaters. They prevent eutrophication of water by removing excess nitrogen and phosphorus. They reduce soil erosion through the protection provided by their vegetation. They protect and support diversity of flora and fauna being home to 40% of known biodiversity. They are global food bowls as about 30% of global food production is supported by wetlands.

Almost all of the world's aquatic birds use wetlands as feeding and breeding grounds. Migratory birds use wetlands throughout their range which can sometimes literally be from one pole of the earth to another.

Climate change- the burning issue of 21st century can alter wetlands forever, but in turn, wetlands can also help to mitigate the impact of climate change as they regulate, capture and store greenhouse gases. Their dense aquatic vegetation,

and algal activity can regulate decomposition which generate greenhouse gases.

In view of this, it will not be an understatement to say that the future of humanity depends on wetlands. Many of the challenges of the future can be met through conserving and using wetlands sustainably, such as food and water security, human health, disaster risk reduction and climate change resilience.

The Government of Haryana is sparing no effort in making these wetlands a landscape of world repute and the efforts earned status and recognition to the two wetlands of Haryana on the International platform and they have been included in the Ramsar sites in the year 2021.

About 1441 wetlands have been mapped in Haryana. In addition, smaller wetlands of less than 2.5 hectares have been identified across the state numbering to 10529. The estimated area under wetlands in Haryana is 42478 ha which is around 0.86 per cent of the geographic area.

The wetlands in Haryana attract more than 80 migratory bird species besides acting as home to a number of resident bird species. Sultanpur National Park witnesses aquatic faunal guests from as far as Arctic and Siberia. These beautiful winged guests are a visual treat and make the wetland resilient during their stay from fall of September to onset of spring.

I am delighted to see how this very attractive 'Coffee Table Book' on the diverse avian diversity assemblage has shaped up and has become a publication which I am sure all of us would be proud of in the days to come.

My compliments to all those involved in the publication of this excellent document.



Founded on 1st November 1966 Haryana is a small state of Indian Union covering an area of about 44, 212 sq. km mainly across the Indo-Gangetic Alluvial Plain. The state has mainly 4 physiographic regions namely, Siwalik hills, Alluvial Plains, Aravalli Hills and Aeolian plains. Haryana has a variety of landscapes ranging from hills in the northern region to almost flat alluvial plains in the central parts, and sand dunes in the south. 80% of Haryana's total geographical area is under agriculture. Forests in Haryana are divided into 10 forest types as per Champion & Seth classification system. More than 500 bird species have been recorded in the State which is about 40% of total bird species known to exist in the country. Two National Parks, eight Wildlife Sanctuaries and two Conservation Reserves constitute the Protected Area network of the State covering 0.75% of its geographical area.

Wetlands are important bird habitats that attract and foster a healthy bird diversity. Out of 22 districts of Haryana three districts, namely Panchkula, Yamuna Nagar and Karnal, can be called as wetland rich with 3.53%, 2.79% and 1.65% of their geographic area under wetlands, respectively.

The variety of physiographic regions and wetlands in the state provides a very suitable habitat to

many bird species. During winters a good variety of migratory birds visit various parts of the state. Protected areas along with other biodiversity rich areas like village forests and waterlogged areas in many districts are also home to many local bird species. Apart from hosting migratory birds, Haryana's wetlands also serve as stopovers to many bird species on their way to other parts of India particularly Rajasthan and coastal areas of Gujarat. Besides notified wetlands, the bowl shape topography of area comprising of Jhajjar, Rohtak and Sonapat districts leads to formation of large water bodies due to water drainage deficits. These waterlogged areas also provide habitat to migratory birds for varying periods of time. At its peak these areas can have as many as 300 bird species, local or migratory.

DISTRICT-WISE WETLAND AREA					
Sr. No.	District	Geographic Area	Wetland Area	% of total wetland area	% of district geographic area
		(sq. km)	(ha)		
1	Panchkula	898	3173	7.47	3.53
2	Ambala	1569	3036	7.15	1.27
3	Yamunanagar	1756	4893	11.52	2.79
4	Kurukshetra	1530	1671	3.93	1.37
5	Kaithal	2317	1332	3.14	0.48
6	Karnal	2520	3246	7.64	1.65
7	Panipat	1268	1862	4.38	1.06
8	Sonapat	2260	2154	5.07	1.56
9	Jind	2702	2153	5.07	0.79
10	Fatehabad	2520	1539	3.62	0.56
11	Sirsa	4277	1776	4.18	0.42
12	Hisar	3983	2811	6.62	0.45
13	Bhiwani	3283	1748	4.12	0.34
14	Rohtak	1745	1683	3.96	0.38
15	Jhajjar	1834	2194	5.17	1.20
16	Mahendragarh	1899	442	1.04	0.26
17	Rewari	1594	442	1.04	0.28
18	Gurugram	1258	2764	6.51	1.31
19	Faridabad	741	3559	8.38	1.29
Total		39954	42478	100.00	

Conserving and improving Haryana's bird habitats is a policy imperative. This is because the robustness of ornithological diversity is directly correlated to, and is the first of indicator of, positive or negative changes in the larger ecosystem. It is hoped that publication will promote a better understanding of Haryana's bird heritage amongst the readers and lead to a better societal response to efforts aimed at conservation of all natural resources, including birds.



Order : Phoenicopteriformes
Family : Phoenicopteridae

Flamingos

Flamingos are the flagship species of saline wetlands of India . Always found in large flocks they are large wading birds with long necks & legs and webbed feet. In their adulthood they are bear a pink plumage. Two species of Flamingos are found in India. They also visit Haryana in large numbers during winters.

Flamingos prefer shallow water bodies in flat terrain with brackish/saline water. Small invertebrates and algae found in shallow water or mudflats is their favourite food. They are very specialized feeders and immerses their head in shallow waters to filter their food like algae, invertebrates, planktons etc. They are also loyal spouses and pair for life.

For breeding Flamingos look for shallow brackish water areas and saltpans, like the Greater Rann of Kutch in Gujrat, and make a nest on ground with mud to nurture their offsprings.



Greater flamingo
Phoenicopterus roseus



Lesser flamingo
Phoenicopterus minor



Pelicans

Order : Pelecaniformes

Family : Pelecanidae

Pelicans are distinguished by their large elastic throat pouches which they use as a dip net to catch fish. The pouch, however, is not used to store the fish and the catch is swallowed immediately after its capture. Pelicans inhabit lakes, rivers, and seacoasts in many parts of the world.

Out of total seven known Pelican species of the world, three are found in India. Out of these three, Haryana is home to two, Great White Pelican and Dalmatian, during winters. However, offlate sightings of Pelicans in Haryana are less common than in the past. earlier.

Pelicans fly in a specialized way, either in V shape or in a line. They are powerful fliers and move forward with a steady flap, and the head down back between the shoulders.

Great White Pelican and Dalmatian make its nest on the ground with mud and dried vegetative material on the banks of water bodies while the Dalmatian makes its nest on trees.



Dalmatian pelican
Pelecanus crispus



Great white pelican
Pelecanus onocrotalus



Great white pelican
Pelecanus onocrotalus



Geese & Ducks

Order : Anseriformes

Family : Anatidae

Ducks and Geese are highly gregarious waterfowls that migrate, feed, roost and nest together, often in mixed flocks. Ducks are small, short-necked, large-billed water birds. Their preferred habitat is grass lands, lakes, crop fields, river mudflats and irrigation tanks. One of the main feature that differentiates these two waterfowls is their size. In general, geese are larger than ducks. with longer neck and legs and also a more elongated body. Ducks are smaller, with a stout body and short legs. The other difference is placement of legs under the torso. In case of Ducks legs are more towards the rear while they are more towards the front in Geese.

Ducks are divided into three groups, Dabbling (shoveler, mallard, gadwall, pintails, wigeon and teals), Diving (pochards) and Perching (Cotton teal, whistling duck). Perching ducks perch on branches using their long-clawed toes and nest in holes in trees. During mating period they become more colorful. Other ducks' nest on the ground and use local grass and other vegetative parts of aquatic plants for making their nest.

Though ducks are largely vegetarian feeding on grasses, seeds and roots of aquatic plants, during breeding time they also eat small invertebrates. While some ducks are silent on wintering grounds, others are given to honking and loud cackling. Ducks molt during summers after the breeding season to hide themselves from predators.

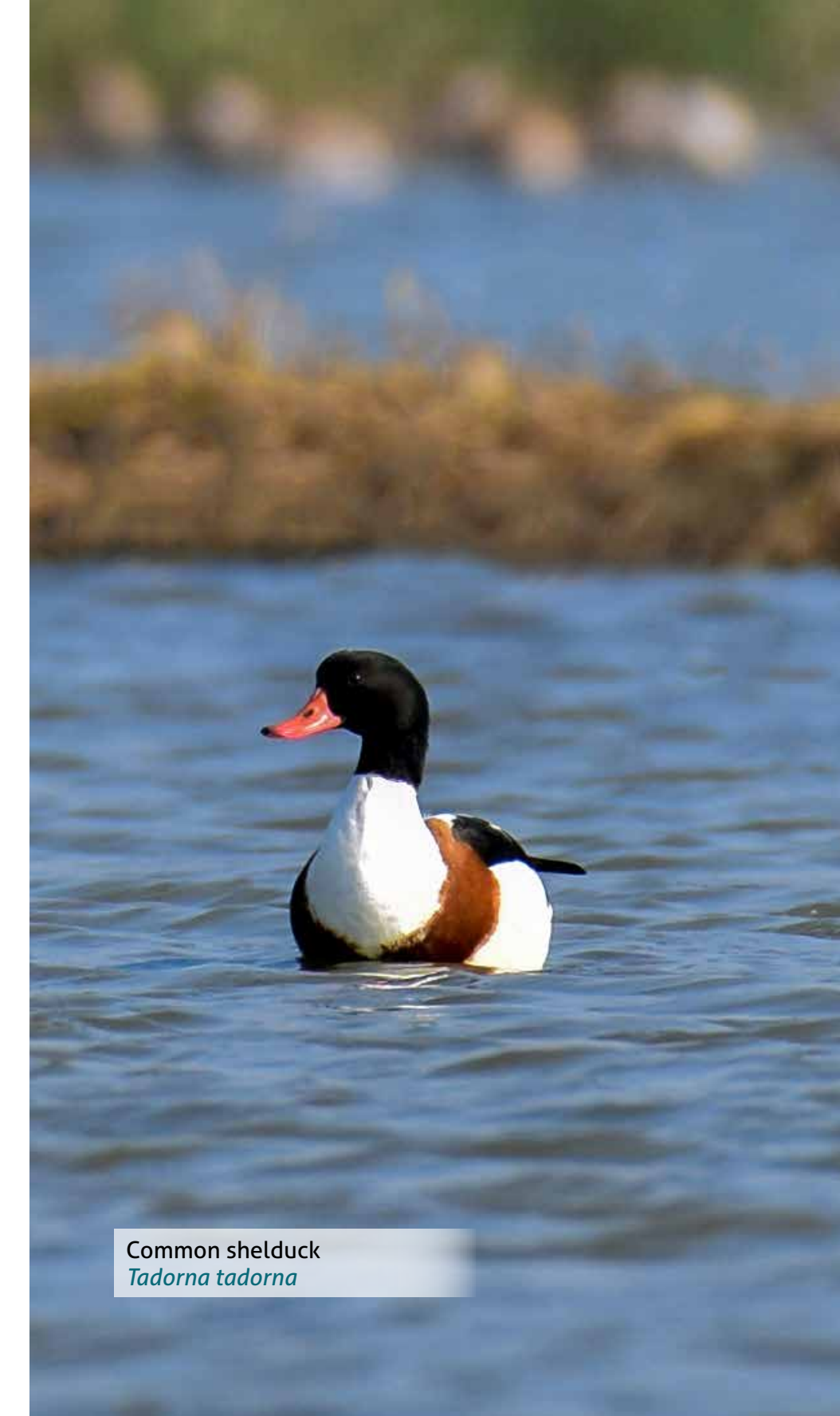
Like Flamingos most geese too pair for life, nest on the ground and co-exist in flocks (called gaggles) . Powerful and high-flying, they fly in V-formations to conserve energy while migrating over long distances (~ 8000 KM) between India and Eastern Asia/ Northern Eurasia, overflying the mighty Himalayas.



Bar-headed goose
Anser indicus



Cotton Teal
Nettapus Coromandelianus



Common shelduck
Tadorna tadorna



Greylag Goose
Anser anser



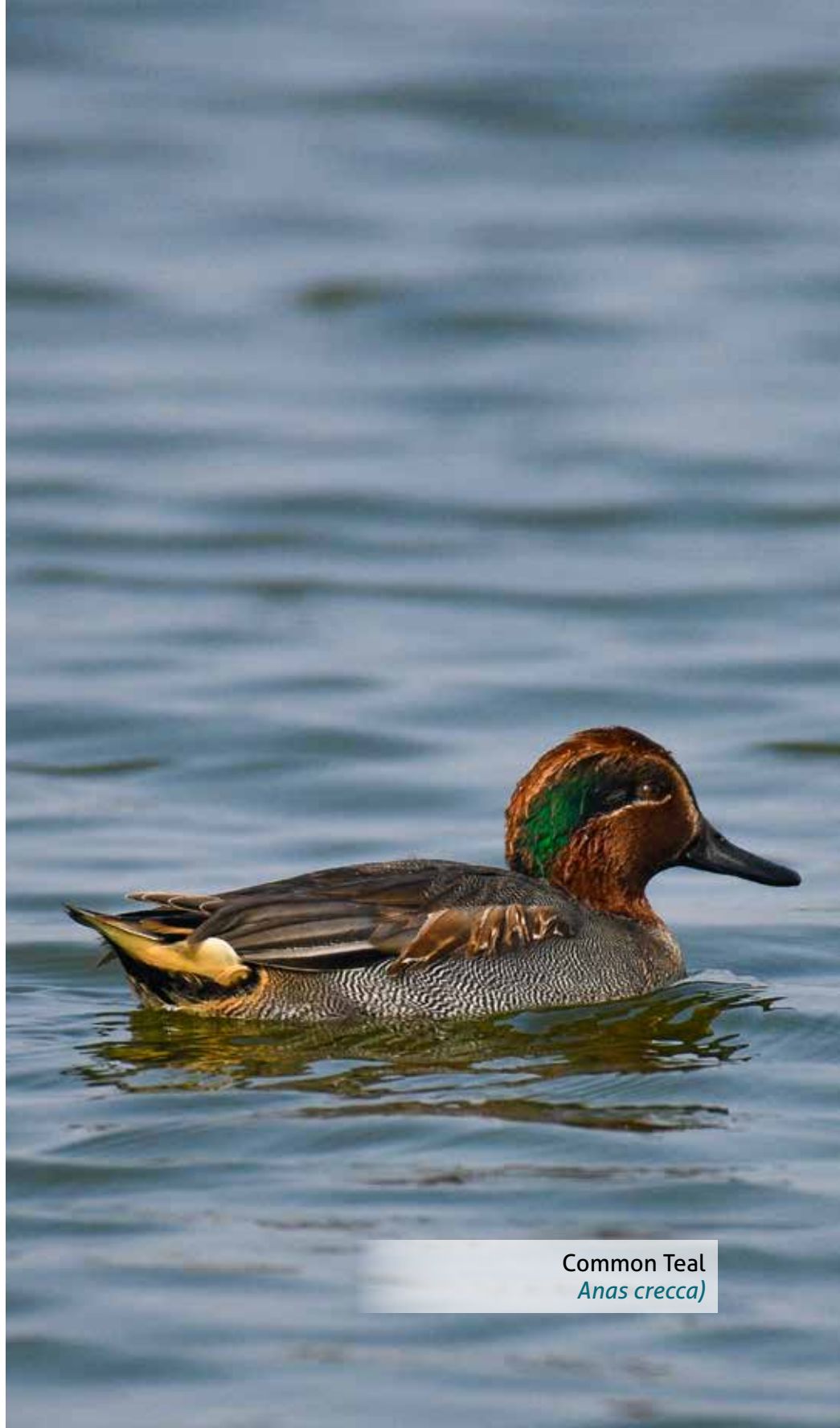
Mallard
Anas elatyrhynchos



Northern Pintail
Anas acuta



Northern Shoveler
Spatula clypeata



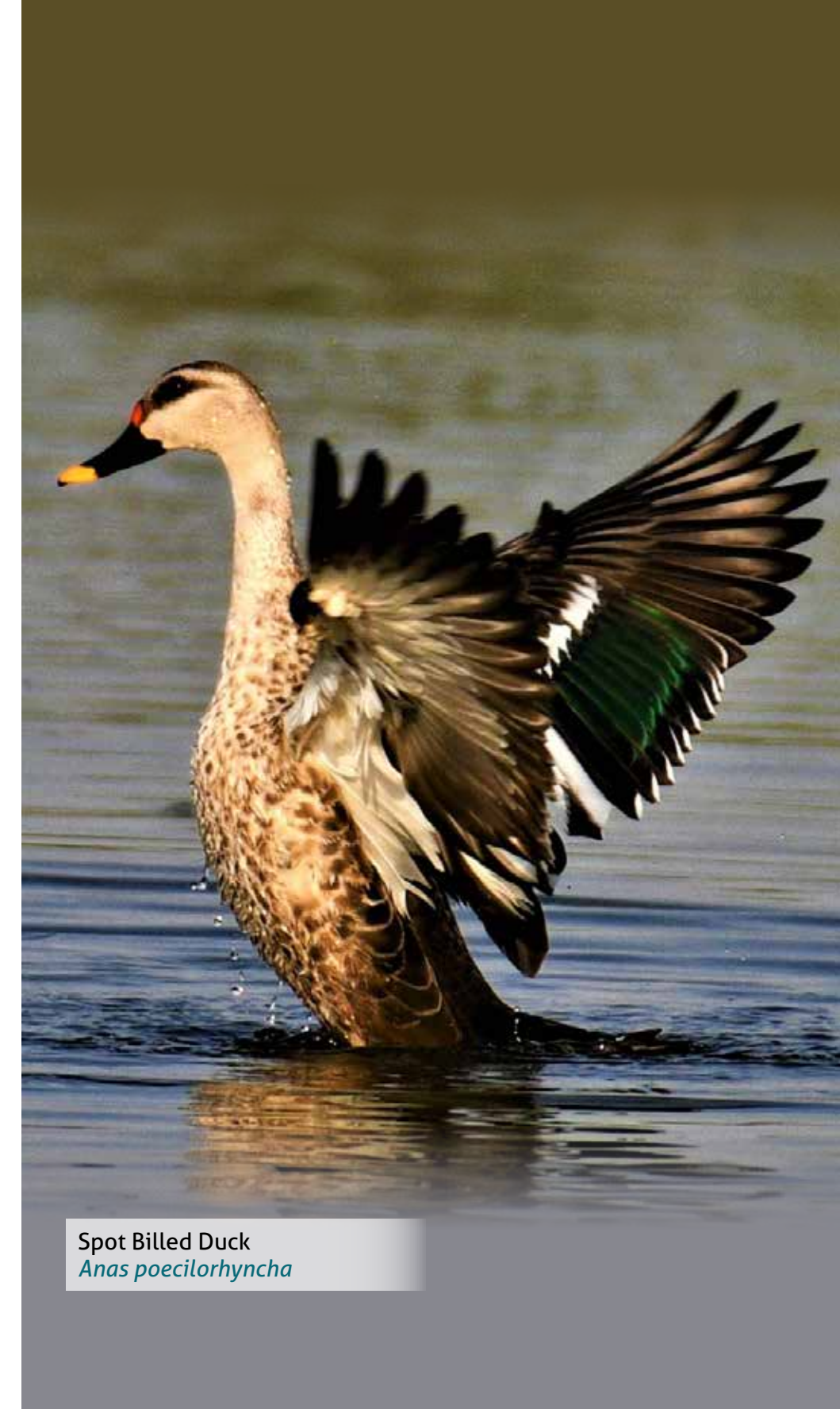
Common Teal
Anas crecca



Garganey
Anas querquedula



Baikal teal
Sibirionetta formosa



Spot Billed Duck
Anas poecilorhyncha



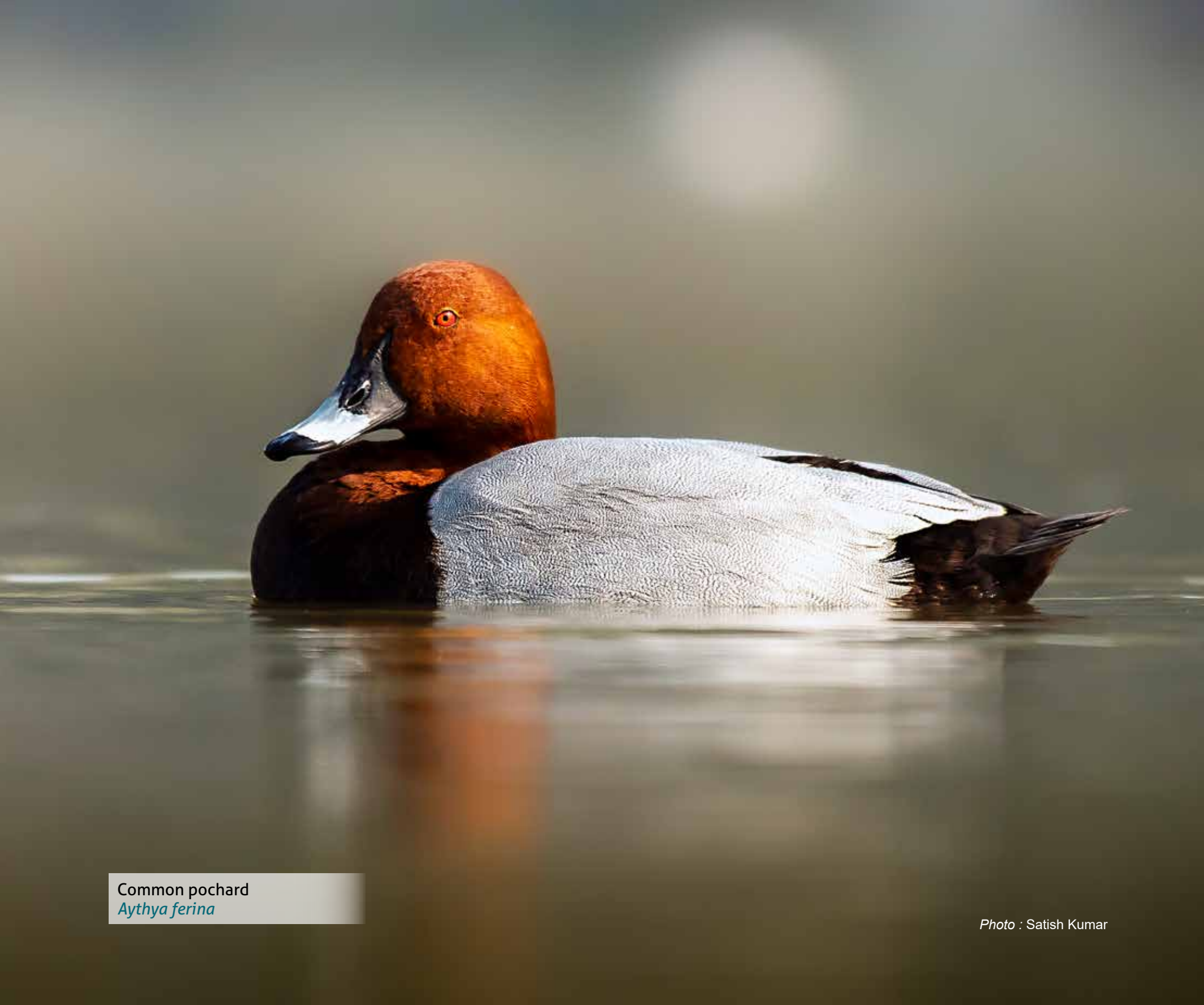
Lesser White-fronted Goose
Anser erythropus



Eurasian wigeon
Mareca penelope



Ruddy Shelduck
Tadorna ferruginea



Common pochard
Aythya ferina

Photo : Satish Kumar



Ferruginous Pochard
Aythya nyroca



Tufted Duck
Aythya fuligula



Red-crested Pochard
Netta rufina



Knob Billed duck
Sarkidiornis melanotos



Lesser whistling duck
Dendrocygna javanica



Storks

Order : Ciconiiformes

Family : Ciconiidae

Storks are large birds with long bills, necks & legs, large wingspans and a short tail. In flight they tend to soar at great heights using air currents to conserve energy. They feed on fish, frogs, large insects, lizards, snakes, crustaceans and mollusks while walking slowly in marshes, grasslands and on the banks of rivers & lakes. They nest on the trees. Storks are found in large flocks, except during the breeding season, when they form pairs and isolate. Mostly silent, they clatter their bill loudly to communicate at the nest. There are 19 species of storks worldwide.

Cranes

Order : Gruiformes

Family : Gruidae

Cranes are tall wading birds with long neck and legs. They are found on all continents with the exception of Antarctica and South America. Cranes are powerful fliers and fly with head and neck extended forward and legs stretched out backward. Most cranes are gregarious in nature but pairs leave the group to mate during breeding time. Noisy by nature, Cranes have a special kind of resonant and far-reaching musical trumpet like call. They feed on small animals, grains and grass shoots. Both genders have a spectacular and beautiful dance that they perform throughout the year. Cranes construct platform nests in shallow water, and typically lay two eggs at a time. Both parents help to rear the young, which remain with them until the next breeding season.



Sarus crane
Grus antigone



Sarus crane
Grus antigone



Common crane
Grus grus



Demoiselle crane
Grus virgo



Painted Stork
Mycteria leucocephala



Black-necked stork
Ephippiorhynchus asiaticus



Asian openbill stork
Anastomus oscitans



Woolly-necked stork
Ciconia episcopus



European white stork
Ciconia ciconia



Ibises & Spoonbills

Order : Pelecaniformes

Family : Threskiornithidae

These are large birds distinguished by their long bill, neck and legs. Ibises are medium sized wading birds found in shallow water, mudflats and grasslands. Spoonbills have a large spatulate spoon like bill apt for catching floating prey in shallow waters. They feed mostly on fishes, mollusks and crustaceans.

Ibis and Spoonbill make nests on low bushes and trees near waterbodies and breed in mixed vast colonies. .

There are three Ibis species and one spoonbill species found in India. All of them are also residents of Haryana.



Red-naped ibis
Pseudibis papillosa



Black-headed ibis
Threskiornis melanocephalus



Glossy ibis
Plegadis falcinellus



Eurasian Spoonbill
Platalea leucorodia



Eurasian Spoonbill
Platalea leucorodia



Jacanas

Order : Charadriiformes

Family : Jacanidae

Also called lily-trotter or lotus birds, Jacanas are a group of tropical waders. They are noted for their elongated toes and toenails that allow them to spread out their weight while foraging on floating or semi-emergent aquatic vegetation. They inhabit freshwater lakes, water tanks and marshes. Of the eight species of Jacanas known to exist, pheasant-tailed and bronze-winged jacanas are found in the Asian continent. The pheasant-tailed jacana migrates from the north of its range into peninsular India and south-east Asia.

Grebes

Order : Podicipediformes

Family : Podicipedidae

Grebes are aquatic birds adapted for diving to under water to catch their prey (mostly fish and aquatic invertebrates). They are tail less birds having lobed feet with legs towards the back of the torso. They usually feed single, but forms groups in the non-breeding season. The long pair bond that makes it possible is formed and strengthened by the unique courtship displays, including ritualized preening, head shaking, diving, carrying nest material and rapid water treading with the body in a nearly vertical position. They build their nests on floating platforms of aquatic vegetation. They are specialised to increase the height of their nest when level of water comes up.



Bronze winged Jacana
Metopidius indicus



Pheasant-tailed jacana
Hydrophasianus chirurgus



Little Grebe
Tachybaptus ruficollis



Great crested grebe
Podiceps cristatus



Horned Grebe
Podiceps auritus



Black-necked grebe
Podiceps nigricollis



Small Waders

Order : Charadriiformes

Famil(ies) : Scolopacidae, Charadriidae, Recurvirostridae, Rostratulidae

Sandpiper, snipe, stilt, stint, plover, curlew, pratincole, lapwing and avocet are small to medium sized wading birds. They are distinguished by their long bills and legs. Marshy land and mudflats are their preferred habitat where they feed on flies and small aquatic invertebrates.

Avocets breed in Central Asia and Europe and migrates to India during winters. They catch prey by making a back and forth sweeping action by their bill held partly open.

Stilt is indigenous species found in warmer regions, around ponds, where they probe the mud and weedy shallows for crustaceans and small aquatic animals.

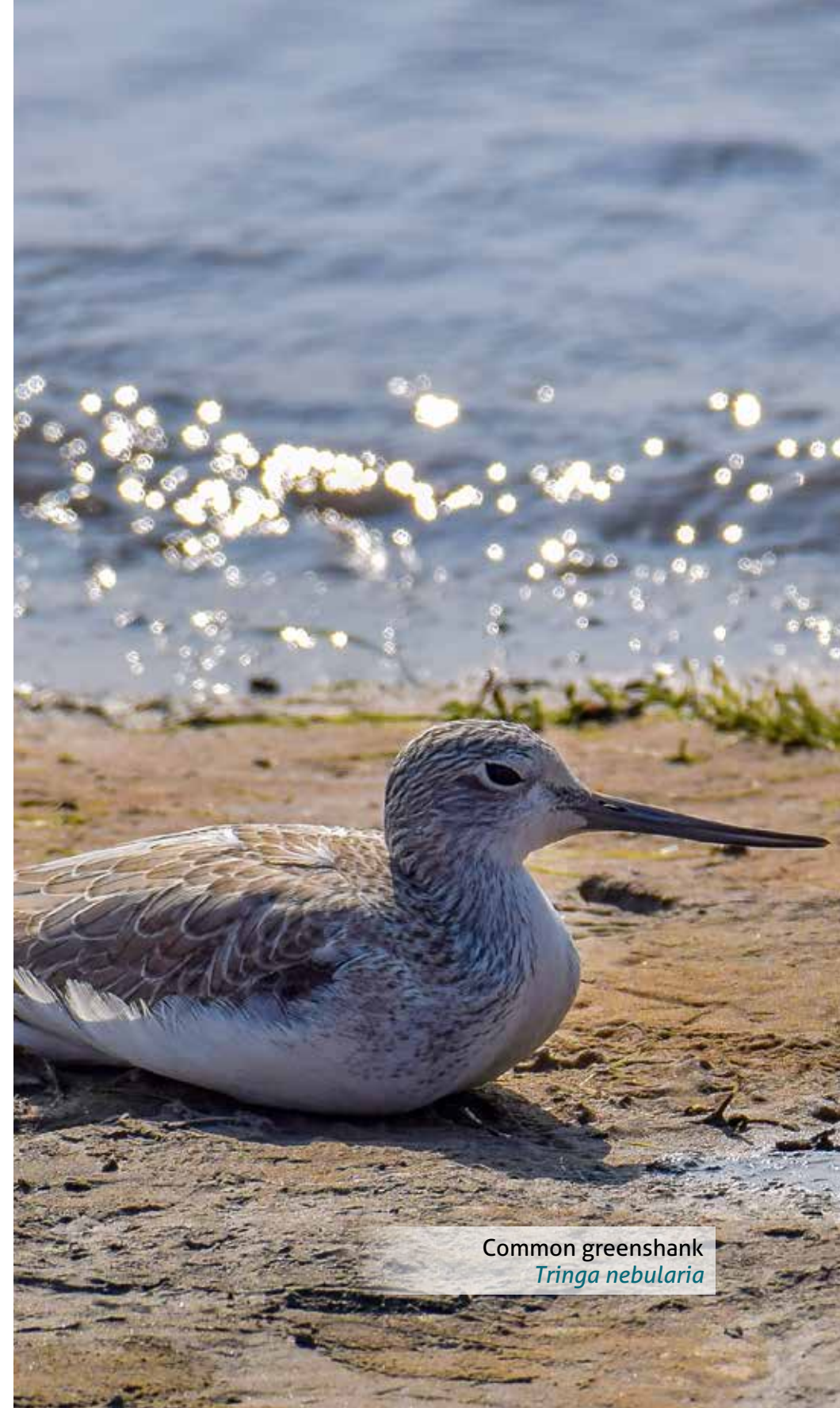
Plovers and Lapwings have rounded heads, short necks and short bills. Their flight is swift and direct. Plovers feed in flocks while running along beaches and shorelines, snapping up small, aquatic, invertebrate animals for feed. Plovers are quick to give alarm through melodious whistling calls. They are strongly migratory and travel from places as far as Alaska (USA) to India.



Common Redshank
Tringa totanus



Spotted Redshank
Tringa erythropus



Common greenshank
Tringa nebularia



Wood sandpiper
Tringa glareola



Marsh Sandpiper
Tringa stagnatilis



Common Sandpiper
Actitis hypoleucos



Terek Sandpiper
Xenus cinereus



Ruff
Calidris pugnax



Red-necked Phalarope
Phalaropus lobatus



Black-tailed godwit
Limosa limosa



Pied avocet
Recurvirostra avosetta



Black-winged Stilt
Himantops himantops



Eurasian Curlew
Numenius arquata



Common Snipe
Gallinago gallinago



Painted snipe
Rostratula benghalensis



Oriental pratincole
Glareola maldivarum



Small pratincole
Glareola lactea



Lesser Sand plover
Charadrius mongolus



Greater Sand Plover
Charadrius leschenaultii



Kentish plover
Charadrius alexandrinus



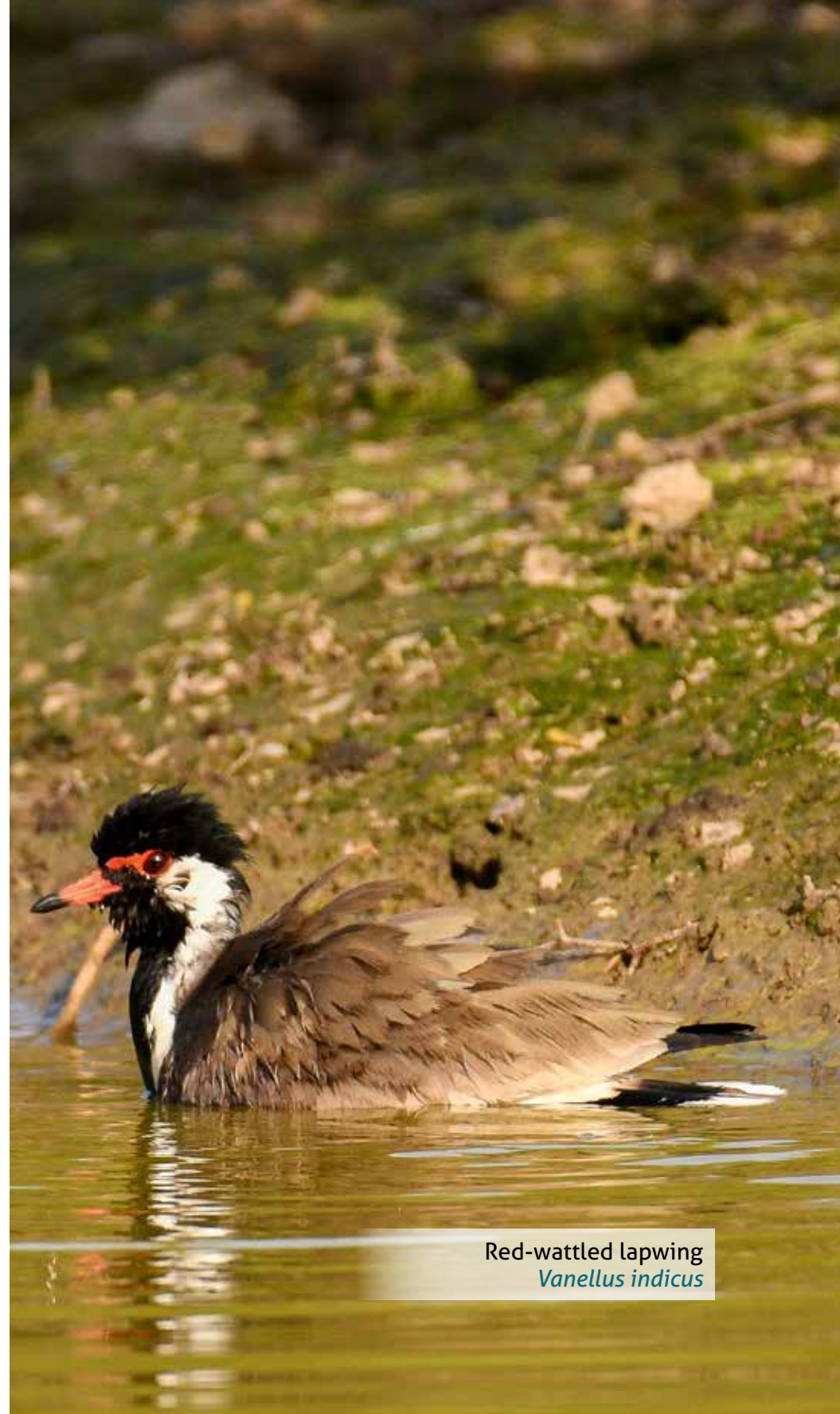
Grey Plover
Pluvialis squatarola



Little ringed plover
Charadrius dubius



Pacific golden plover
Pluvialis fulva



Red-wattled lapwing
Vanellus indicus



Yellow-wattled lapwing
Vanellus malabaricus



White-tailed Lapwing
Vanellus leucurus



River lapwing
Vanellus duvaucelii



Herons, Egrets & Bitterns

Order : Pelecaniformes

Family : Ardeidae

These are medium to large sized wading birds with long legs. They prefer marshes and banks of rivers and other waterbodies for habitat.

Herons are diurnal creatures having slender bodies and a long neck. Herons stand motionless at the edge of waterbody only to trick the prey closer. They nest on trees and bushes near waterbodies in small colonies called heronries.

Bittern usually skulks in reed beds as they can clamber upon reed stems with ease and agility. They are solitary birds often seen flying low over reedbeds. When frightened bitterns freeze, point the head & neck upwards and compress their feathers so that the whole body appears elongated. Herons and Bitterns feed on a wide variety of aquatic prey like fishes, frogs and other swamp and marsh small animals.

Most egrets have white plumage and develop long ornamental nuptial plumes for the breeding season. Their habits are generally like those of other herons, but some perform an elaborate mating dance involving the plumes. Cattle Egrets spend much time on land and associate with domestic and wild grazing animals, feeding on insects that they stir up while grazing and sometimes removing ticks from their hides.



Cattle egret
Bubulcos ibis



Black-crowned night heron
Nycticorax nycticorax

Photo: Satish Kumar



Purple heron
Ardea purpurea



Grey Heron
Ardea cinerea



Little Egret
Egretta garzetta



Black bittern
Ixobrychus flavicollis



Eurasian bittern
Botaurus stellaris



Intermediate Egret
Ardea intermedia



Great Egret
Ardea alba



Yellow bittern
Ixobrychus sinensis



Gulls, Terns & Skimmers

Order : Coraciformes

Families : Laridae

Gulls are medium-sized to large birds having a stout bill alongwith relatively long, narrow wings, moderately long legs and webbed feet. They are highly adaptable, gregarious and very opportunistic feeders. They feed on insects, molluscs and crustaceans on beaches; worms and grubs in fields; fish along shores; garbage from ships. Large gulls’ also prey on eggs and young ones of other birds.

Terns are small to medium-sized birds with gull-like bodies. Though they can also eat insects, their primary food is crustaceans and small fish. They catch fish by diving into water from above. They are vocal and gregarious birds and usually breed on the ground on islands in small colonies.

Skimmers have a long scissor-like bill with elongated lower mandible which is one-third longer than the upper mandible. They feed by skimming the water surface with the bill open and lower mandible partly immersed in water to snap down a fish or crustacean soon as it is encountered.

Kingfishers

Order : Coraciformes

Families : Alcedinidae

Kingfishers are small to medium-sized birds with a large head, a long & strong bill and short legs. They are vocal, colourful birds with a unique hunting technique where they sit still to observe the movement of prey from a perch. Once the quarry is sighted, they plunge into the water to grab it and return (usually) to the same perch. Their preferred food is mainly fish, tadpole, frogs, snakes, crabs, lizards and rodents.



Black-headed gull
Chroicephalus ridibundus



Black-headed gull
Chroicephalus ridibundus



Pallas's gull
Ichthyaeetus ichthyaeetus



Indian skimmer
Rynchops albicollis



Gull-billed tern
Gelochelidon nilotica



River Tern
Sterna aurantia



Common kingfisher
Alcedo atthis

Photo: Satish Kumar



Pied kingfisher
Ceryle rudis



Pied kingfisher
Ceryle rudis



Crested kingfisher
Megaceryle lugubris

Photo : Satish Kumar



White-breasted kingfisher
Halcyon smyrnensis



Crakes, Moorhens & Coots

Order : Gruiformes

Family : Rallidae

These are small to medium-sized wading birds with medium to long sized legs. Rails, as the members of Rallidae family commonly called, are very secretive birds and hide among reeds near the edges of water uttering their calls mostly during night. As a result they are more often heard than seen. While Coots and Moorhens spend much time swimming, rails are mainly terrestrial. Swamphen or Gallinules are noisy and inquisitive birds. They build bulky nests of rushes on, or near the water.

Moorhens are aquatic birds that are blackish in color with a red and yellow beak and long, green legs. Seen closer-up, they have a dark brown back and wings and a more bluish-black belly, with white stripes on the flanks. They primarily feed on water plants, seeds, fruit, grasses, insects, snails, worms and small fish. One can find moorhens around any pond, lake, stream or river, or even ditches in farmland. Moorhens can live in cities as well as the countryside.

Coots are medium-sized water having predominantly black plumage, and can be often seen swimming in open water. They are close relatives of the moorhen. However, the Coot typically appears 'dumpier' and lacks the distinctive red frontal face of the moorhen. They are omnivorous, eating mainly plant material, but also small animals, fish and eggs. They are aggressively territorial during the breeding season, but are otherwise often found in sizeable flocks on the shallow vegetated lakes they prefer.



Purple swamphen
Porphyrio porphyrio



Common coot
Fulica atra



Common Moorhen
Gallinula chloropus



Baillons Crane
Porzana pusilla



Common Moorhen
Gallinula chloropus



White-breasted Waterhen
Amaurornis phoenicurus



White-breasted Waterhen
Amaurornis phoenicurus



Comorants & Darters

Order : Suliformes

Famil(ies) : Phalacrocoracidae, Anhingidae

Cormorants are medium to large-sized, long necked aquatic birds with a hook-tipped bill. They are also referred to as 'shag'. They often perch for a long time in upright posture with spread wings and tail on trees, posts or rocks. Inhabiting seacoasts, lakes, rivers and other water bodies they forage in groups, mainly feeding on fishes caught through underwater pursuit. It is interesting to watch them toss the fish they catch upwards before gulping it.

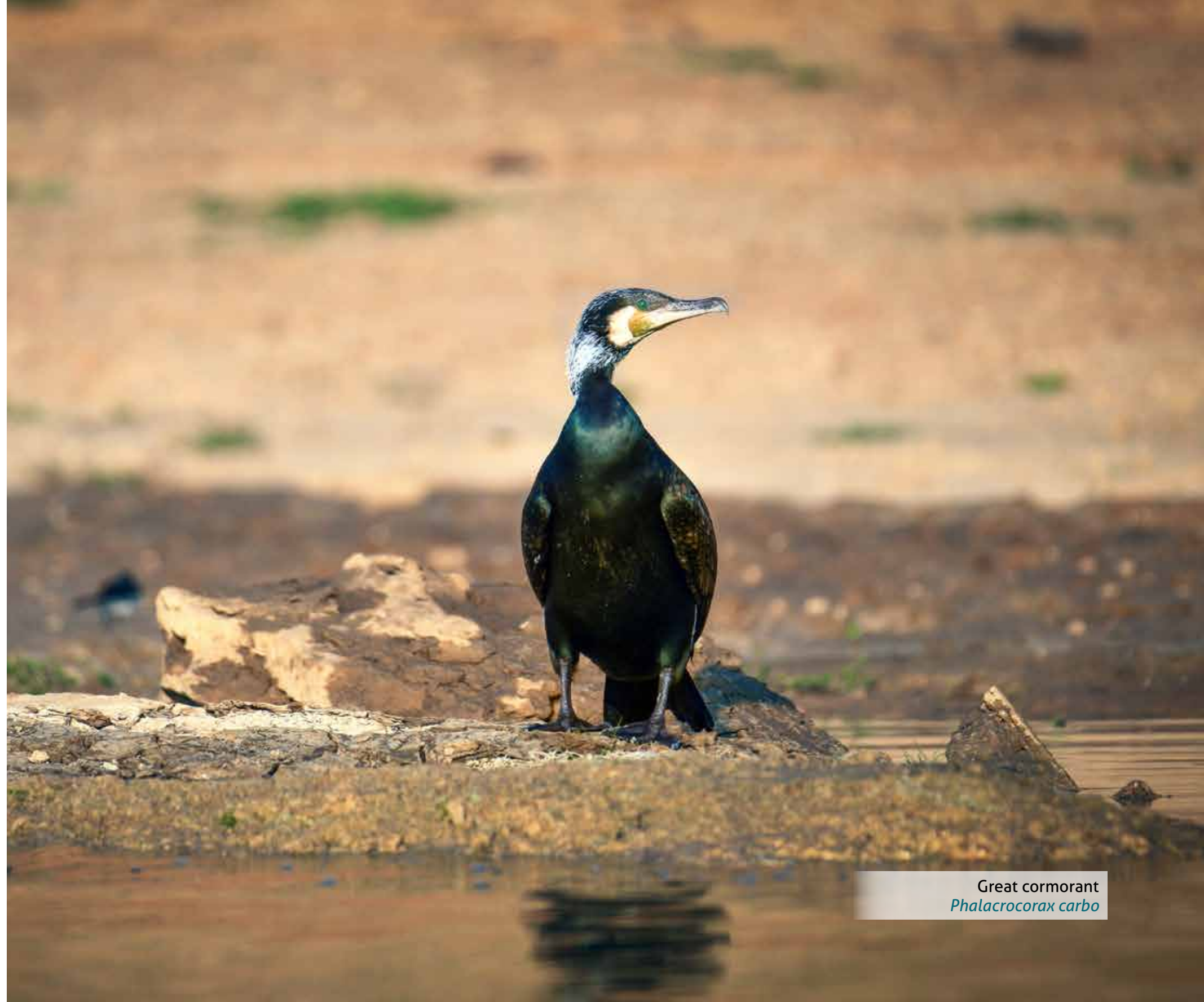
Darter is also called anhinga or snakebird. It is a large slender and long necked aquatic bird that hunts fish underwater. It swims (darting like a snake) nearly submerged, with only its head and neck showing above water. to spear the fish by its serrated bill. It makes nests on trees and bushes.



Little cormorant
Microcarbo niger



Indian cormorant
Phalacrocorax fuscicollis



Great cormorant
Phalacrocorax carbo



Oriental darter
Anhinga melanogaster

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Landscape diversity and variety of seasons that our great nation is endowed with is indeed a blessing. The state of Haryana too reflects this natural bounty that ranges from stabilized sand dunes in the south-west, Aravalli ranges in the south, bowl-shaped depression in the centre, the Saraswati and Yamuna basins in the north east and the Shivalik ranges in the north. Add to this the pleasant spring, the hot summer, a hot and humid monsoon season followed by a cool winter.

Put together, this cocktail of topography and seasons engenders ideal habitats for a wide variety of birds. It's no wonder that despite being a predominantly agricultural state, Haryana boasts of being home to almost 50% of the species of birds found in India.

This volume is a humble effort to highlight Haryana's bird diversity so as to create a larger constituency of support for plans aimed at its conservation, and proliferation. It is hoped that readers of the book will feel encouraged to make more such efforts that document, describe and celebrate our natural wealth.



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