SERIES 1

Common birds
of the Maldives

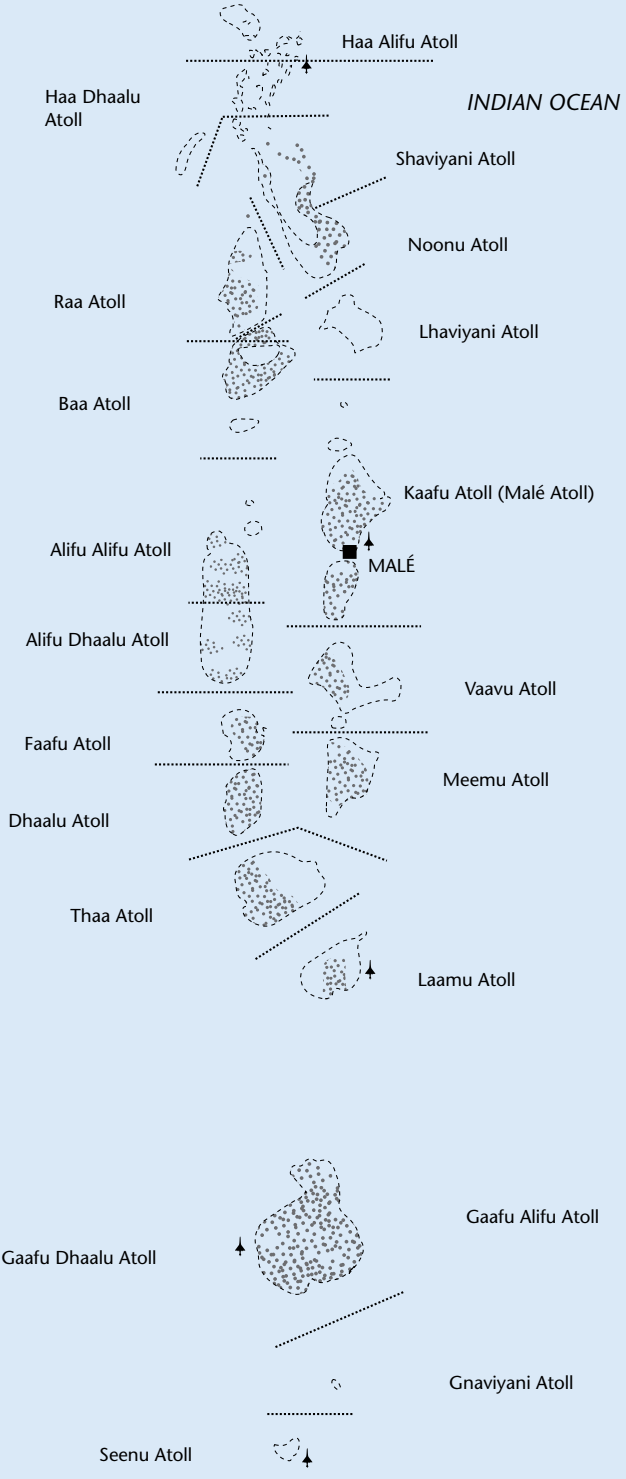


Common birds
of the Maldives

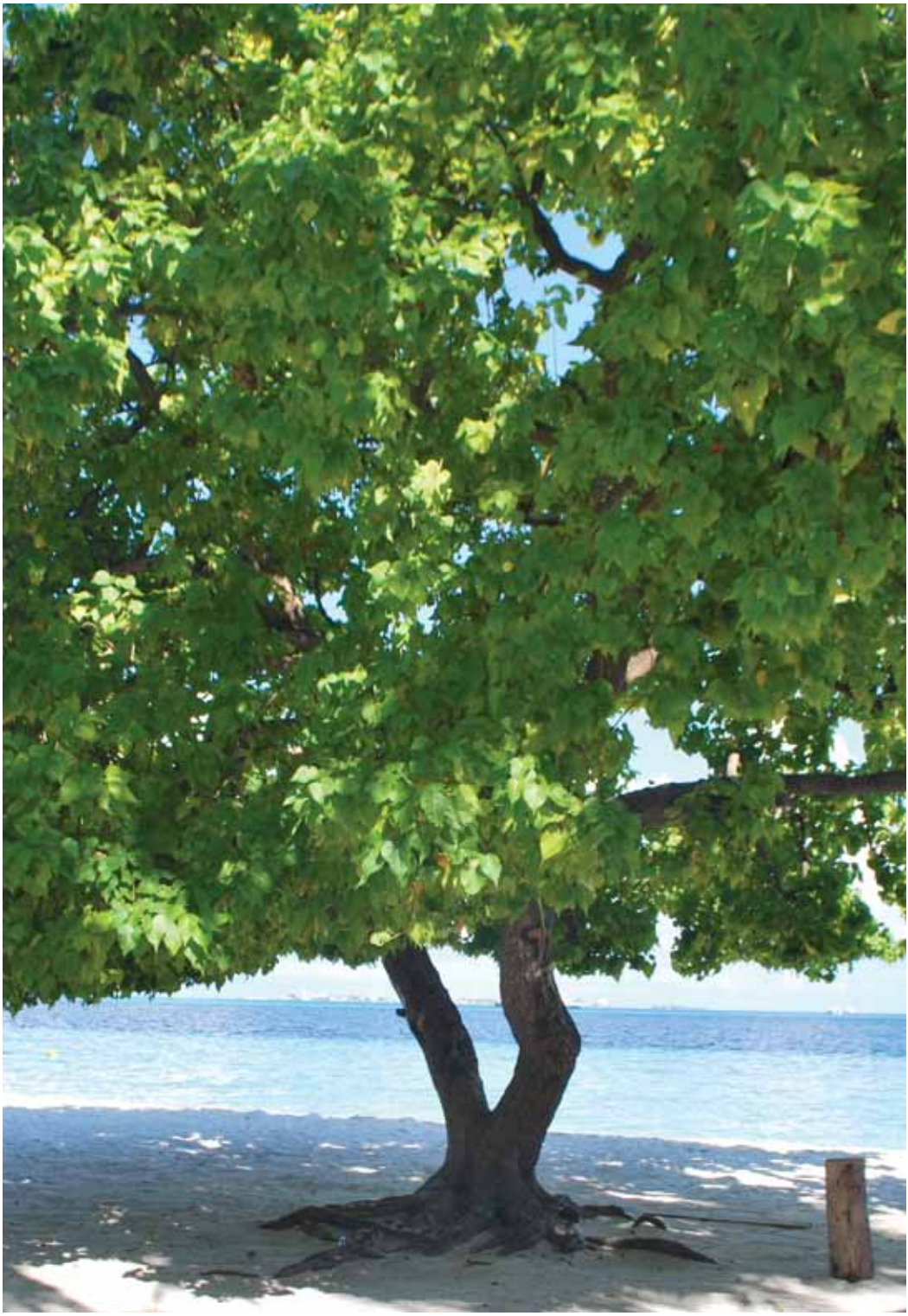
LIVE&LEARN
Environmental Education

The Maldives

- There are approximately 1190 islands in the Maldives with some form of vegetation on them.
- Approximately 200 are inhabited islands and 990 are uninhabited.
- There are 26 distinct geographical atolls. These are divided into 20 administrative regions, with the capital Male' making up a separate administrative unit.
- The Maldives is 860km long and 130km wide.
- More than 99% of the country is water (115,000km^2) with less than 0.3% land (300km^2).



Contents



INTRODUCTION

Birds

There are more than 10,000 bird species in the world. They nest and breed on all continents and in many different terrestrial habitats. Some bird species have adapted to life on the ocean, only coming ashore to breed. All birds share similar features in that they have two feet, wings, are warm blooded and lay eggs. Birds are magnificent creatures that display an astonishing diversity in colour, size, shape and character. The feathers of a bird are its most prominent feature. The feathers have a number of functions – their colour and shade camouflage the bird in its natural environment, they provide insulation, facilitate flight and display secondary sexual characteristics and sexual display.

The large Grey Heron is a common sight in the Maldives.

Birds are not only beautiful creatures but intelligent too. The Corvid family - crows, ravens, rooks, magpies and jackdaws are considered to be among the most intelligent of birds. Birds are believed to solve problems by insight and learn by example; demonstrate great powers of recall, tool-making and other capabilities, and can engage in complex and meaningful communication.

All bird species lay an egg covered in a protective shell, which is incubated outside the body. It is therefore necessary that a secure location is found where the eggs can be placed, hatch and where the chicks can grow to a stage of independence. Birds throughout the world have developed complex techniques for constructing nests in a range of environments. Nests are constructed using feathers, twigs, moss, lichen and foliage and are usually inconspicuously positioned to conceal the eggs and young birds from predators.

In some species, the male builds the nest and the skill at which he does so is a sign of his suitability as a mate. The female will examine the design and quality of the nest. If it is to her satisfaction she will move in, if not, the male will destroy the nest and start again. There are also birds that never build their own nest but instead place their eggs in that of another. These are called 'brood parasites'. The Cuckoo family is the best known brood parasite. These birds mimic the colour and pattern of their eggs to match those of their host. Swiftly, the brood parasite will remove one egg of the host mother and put its egg in its place.

Once the egg hatches, chicks of different species display varying degrees of development and independence. Some chicks hatch after a short period of incubation but require a lot of nurturing from parents. Other chicks develop for a long time in the egg and are fully feathered and capable of running, feeding and even flying once hatched.

Many bird species undertake long distance migrations to avail of seasonal temperatures and food sources. Migration is triggered by daylight periodicity and weather conditions. Migratory birds spend the breeding season in temperate to arctic regions and the non-breeding season in the tropics or the Southern Hemisphere.

A bird's song is a natural phenomenon of immense beauty. The best time to listen to the birds sing is during the 'dawn chorus.' This extraordinary means of communication alters and adapts depending on the environment and circumstance. Male birds in particular have distinctive songs and calls that demonstrate for example a mark of territory or courtship. Migrating birds often imitate songs of other birds in their wintering and breeding sites displaying points of migration. Some birds mimic the call of another while others change the order, sequence and repetition of phrases to sound more variable. There are male bird species known to have a repertoire of up to 2,000 different songs while others may never repeat the same tune twice throughout their life.

Background to the Maldives

The Republic of Maldives is an island nation located on the Laccadives – Chagos submarine ridge in the Indian Ocean. It is made up of approximately 1900 coral islands situated in 26 ring atolls that stretch across 34,750 m^2 of ocean. Among the 1900 islands, around 200 are inhabited by Maldivians and approximately 87 are tourist resorts. All the islands have a similar topography. They range in size from 0.5 km^2 to 5.0 km^2 and the highest point above sea-level is just 3 meters.

The Maldives enjoys a tropical climate and is warm and humid throughout the year. The weather is influenced by the Indian monsoon and large scale circulation patterns that encompass both the Northern and Southern Hemispheres. The wind patterns switch direction with the monsoon cycle. There are two monsoons, the Northeast Monsoon (dry monsoon from November to April) and the Southwest Monsoon (wet monsoon from June to October). Inter-monsoon periods are often characterized by chaotic wind patterns that lead to major sand movement around the island.

The environment is made up of a number of fragile ecosystems: coral reefs, islands, sea grasses, wetlands and mangroves. While the surrounding ocean is classified as one of the most species rich marine ecosystems in the world, the small low-lying islands are home to considerably less terrestrial biological diversity.

The islands are naturally built on live and dead corals. The visually pristine white beaches are composed of sand, gravel and coral skeletons, all made by organisms with calcareous shells. Terrestrial flora is relatively uniform; salt tolerant shrubs and trees along the island periphery and larger trees and coconut palms inland. Some islands have mangroves and wetland areas. The marine environment is the dominant natural environment of the Maldives. The basic atoll structure is a ring of reefs enclosing a lagoon. Lagoon waters range in depth from 30 – 80 m. At the outer margins of the atolls, the ocean floor reaches a depth of over 2000 m.

Although tropical regions are known to have high bird diversity, the small island size and isolation of the Maldives has meant that avifauna is extremely restricted. Approximately 180 different bird species have been recorded, principally seabirds and waders (shorebirds). Most of the birds

The habitat of the White-breasted Waterhen (Dhivehi Kan'bili) is threatened by solid waste disposal.

The White-breasted Waterhen (Dhivehi Kan'bili) and other birds are commonly held in captivity as pets.

are migrating species and therefore seasonal visitors to the Maldives. Very few reside and breed there. Haa Alifu Atoll, the most northern atoll in the Maldives, is recognized by BirdLife International as an important bird site.

Threats to Birds and Environmental Protection

Like so many animal species on earth, birds are experiencing serious population declines worldwide. The main threats to birds are habitat degradation and loss, unsustainable hunting, poisoning, pollution and disturbance and predation by alien species at breeding sites. Climate change and global warming are known to impact migratory bird species in particular. A bird's behavior and life cycle is closely related to seasonal changes; changes in temperature, wind and daylight periodicity are signals as to when a bird should take flight. The current blending of the seasons is causing birds to migrate earlier. This could drastically affect bird populations as unsynchronized migration and nesting may result in the absence of sufficient food resources at stopover and destination points.

The degradation of wetlands and coastal habitats and the capture of wild birds as pets are serious threats to birds in the Maldives. Since the 1980s however, the Maldivian Government has taken a number of steps in order to minimize the adverse effects of environmental degradation. It is party to international instruments such as the Convention on Biological Diversity (1992), Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (1992), the Cartegena (Biosafety) Protocol (2000) and Rotterdam Convention on the Prior Informed Consent Procedure for certain Hazardous Chemicals and Pesticides in International Trade (2006). Today, approximately 70 bird species are protected under the Environment Protection and Preservation Act (Law 4/93). This is the legal instrument that defines the regulatory and institutional framework for environmental management in the Maldives. The statute provides for the management of protected areas and natural reserves, the conservation of biological diversity and environmental impact assessment procedures and guidelines. Under this Act, the capture, sale and keeping of these birds is forbidden. Conservation and environmental awareness programs are also taking place nationwide such as the Atoll Ecosystem Conservation Project in Baa Atoll, Waste Management and Management of Local Wetlands and Mangroves. The private tourist sector has also become more active in preserving local ecosystems through organizing or taking part in environmental awareness activities for locals and tourists.

Bird Watching and Identification

Bird watching is a great way to get outdoors and enjoy nature. Bird watching allows you to experience and learn about different ecosystems and life within them. Before you embark on your birding trip do some research about the area, its flora and fauna and bring a detailed map.

- To get the most out of your bird watching trip, prepare yourself with the basic birding equipment:
- Binoculars
- Bird identification guidebook
- A notebook allows you to keep a record of specific details such as size and shape, location and time of year
- A hat and sunglasses
- Insect repellent
- Dress in comfortable clothes and choose colours that will give you some camouflage
- Wear comfortable footwear
- A camera

The most important equipment when identifying birds are your eyes and your ears. Some birds would never be detected without hearing their song or call.

To identify a bird:

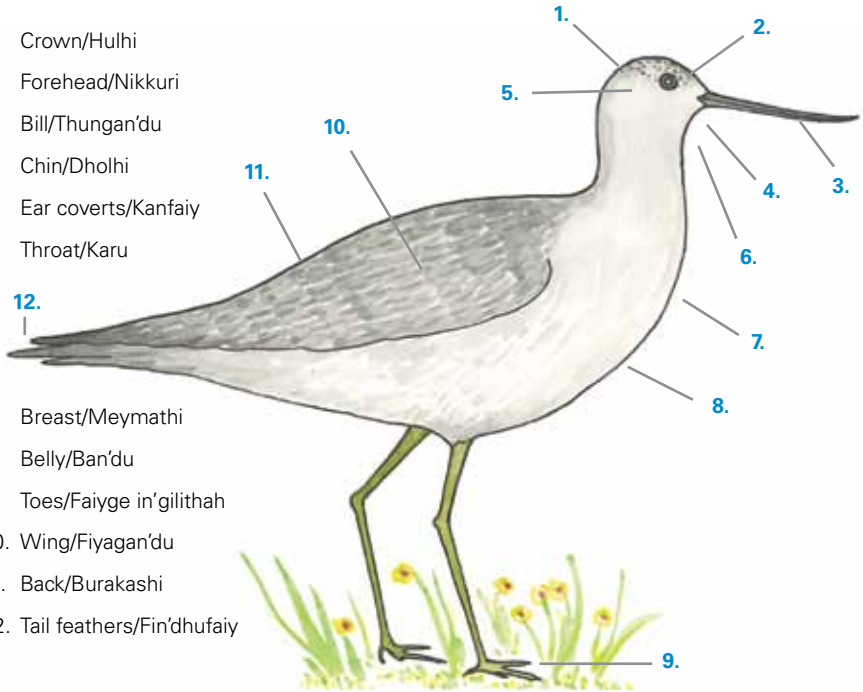
- Take note of its size, shape and colour – the length and colour of its bill, legs and tail.
- Note plumage details – basic colour, upperparts – the back and wings, the under parts – the head and tail.
- Make note of prominent patches of colour and distinctive features.

Having some knowledge about the local habitat and the type of bird that is likely to be found there will also help with identification.

Common Birds of the Maldives will introduce you to the Maldivian environment and the avifauna within it. For each bird species you will find information about its habitat, distribution, how to identify it and population status. REMEMBER! The illustrations and photographs included in this book are simply a guide. A bird's plumage can appear different depending on the light, its age, sex or whether it is breeding or not. Enjoy the experience and remember, birds and humans are part of the same ecosystem – by helping to protect birds and their natural habitats you are also protecting yourself and the environment upon which you too depend for your survival and well being.

Main Features of a Bird

1. Crown/Hulhi
2. Forehead/Nikkuri
3. Bill/Thungan'du
4. Chin/Dholhi
5. Ear coverts/Kanfaiy
6. Throat/Karu
7. Breast/Meymathi
8. Belly/Ban'du
9. Toes/Faiyge in'gilithah
10. Wing/Fiyagan'du
11. Back/Burakashi
12. Tail feathers/Fin'dhufaiy



Section 1

Waders

The name wader or shorebird is associated with the long legged bird species that are commonly found in the shallows of wetlands and coastal environments. There are approximately 200 species of waders worldwide and they make up a large proportion of the bird species found in the Maldives. Their diet generally consists of small invertebrates, molluscs, crustaceans and vegetable matter. Their long bills allow them to pick through the mud, some are believed to have sensitive nerve endings in their bill that allows them to detect prey. Many of these bird species are migratory, breeding in the Arctic and temperate regions and wintering in the tropics. They can travel as far as 13,000 km between destinations. Waders are threatened by climate change and habitat loss at their destination points and along their flyways. Treaties such as the Ramsar Convention (The Convention on Wetlands of International Importance, especially as Waterfowl Habitat, 1971) is an international initiative that encourages the conservation and sustainable utilization of wetland ecosystems.

Kentish Plover / Snowy Plover

Scientific name: *Charadrius alexandrinus*
Family: Charadriidae
Dhivehi name: Kiru Bondana

Distribution and Habitat: The Kentish plover has a global distribution. It breeds in Arctic tundra, deserts, tropical marshes and temperate wetlands of every continent in the world. Along the coast it is found on sandy, pebbly and muddy shores, coastal marshes, lagoons and coral limestone shores. It is uncommon on freshwater and known to avoid rocky or broken ground and exposed coastlines. Most northern populations are fully migratory with separate breeding and wintering ranges.

Description: The Kentish Plover is about 18 cm in length from the tip of its beak to its tail. The plumage varies throughout the world. Males tend to be darker than the females. When breeding, males have a white forehead, a black fore-crown band and a reddish hind-crown. The under-part of the bird is white with a black shoulder patch. Females are brown rather than black. The bill is black and slender, the legs are grey and it has relatively large black eyes. It feeds singly or in small flocks and often roost in larger mixed species flocks. It eats insects and their larvae, crabs, crustaceans, molluscs, spiders and seaweed. It nests solitarily or in small groups near water on bare earth or within vegetation.

Threats: The Kentish Plover is threatened by the degradation and loss of wetlands, disturbance of coastal habitats, pollution and land reclamation. Nonetheless, due to its large distribution range and population it is classified in the 2009 IUCN Red List of Threatened Species under *Least Concern*. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives therefore it is forbidden to capture, sell or keep the Kentish Plover in captivity.

Grey Plover

Scientific name: *Pluvialis squatarola*
Family: Charadriidae
Dhivehi name: Alaka

Distribution and Habitat: The Grey Plover is fully migratory and has a large distribution. It breeds in the Northern Hemisphere and migrates to the Southern Hemisphere. When breeding, it inhabits dry stony tundra with moss, lichen and grass, riverbanks and rocky slopes. Outside the breeding season it is primarily found in coastal areas on seashores, estuaries, lagoons, mudflats and sandy beaches.

Description: The Grey Plover is medium sized, approximately 28 cm from the tip of its bill to its tail. It has long legs, a large head, large dark eyes and a black bill. It is whitish grey with fine mottling above, a white forehead, eyebrow, a barred white tail and diagnostic black wing-tips in flight. When it is breeding, the Grey Plover's diet consists of adult and larval insects and plant matter. Outside the breeding season it feeds on molluscs and crustaceans. It nests in a shallow scrape on dry ground in exposed stony areas. Both parents share in the incubation and feeding of young.

Threats: The Grey Plover is classified under *Least Concern* in the IUCN Red List. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Greater Sand-plover

Scientific name: *Charadrius leschenaultii*
Family: Charadriidae
Dhivehi name: Valu bon'dana

Distribution and Habitat: The Greater Sand-plover is fully migratory. Non-breeding birds winter in Southeast Asia and migrate north to their breeding grounds in Central Asia, Mongolia, Serbia and Northwest China. When the Greater Sand-plover is not breeding it prefers littoral habitats, sandy beaches, coral reefs and lagoons. When breeding, it inhabits sparse areas, uncultivated land or rocky plains in mountainous or desert regions.

Description: The Greater Sand-plover is approximately 22 – 25 cm in length. Its non-breeding plumage is grey-brown on the crown, back and wings, with white under parts and forehead. Males and females have different breeding plumage. The male has a grey-brown crown and nape with a pale chestnut tinge. The tail has a brown-black sub-terminal band. It has a white band on its lower forehead with a black band above it. A black stripe runs from the bill across the eyes and ear coverts like a mask. It has a broad chestnut band across the upper breast. It has a black bill and dark brown eyes with grey-green legs. The female breeding plumage is slightly less chestnut in colour and the mask and frontal band is brown-grey rather than black. When breeding, it primarily feeds on terrestrial insects, during the non-breeding season its diet consists of marine invertebrates such as worms, crustaceans and molluscs. It nests in a shallow scrape on the ground.

Threats: The Greater Sand-plover is vulnerable to habitat loss, pollution and in some locations commercial hunting. Nonetheless, it is classified as *Least Concern* in the IUCN Red List. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Crab Plover

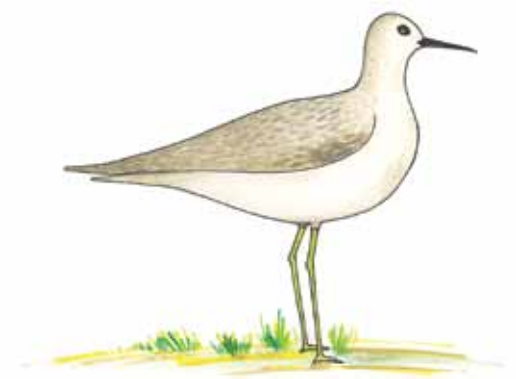
Scientific name: *Dromas ardeola*
Family name: Dromadidae
Dhivehi name: Theyravaa (Female) / Moalha Lun'bo (Male)

Distribution and Habitat: Outside the breeding season, the Crab Plover is distributed throughout the Indian Ocean. When breeding, it concentrates around the Southern Red Sea, the Gulf of Oman and the Persian Gulf. The Crab Plover inhabits sandy coastlines, intertidal mudflats, estuaries and lagoons.

Description: The Crab Plover is the only species within the family Dromadidae. It is 33 – 36 cm in length. It has white plumage on its head and under-parts and black primaries and back feathers. It has a long, black bill. It has long legs, partially webbed toes and a short tail. The diet of the Crab Plover consists of crabs, crustaceans and aquatic worms. It is commonly found foraging in small groups. Its large powerful beak protects it from its prey.

The Crab Plover is unique from other waders in that it nests in an underground burrow on sandy dunes. It nests in colonies with many burrows set close together each reaching about 1 – 2.5 meters in length. The burrow is initially angled downwards then curving up and into the nest chamber. The Crab Plover lays only one egg at a time. The chamber protects the egg from high temperatures and acts as a solar incubator. As the egg remains at an optimum temperature, very little direct incubation from the parent is needed.

Threats: The Crab Plover is vulnerable to oil spills, loss of nesting sites and predation from introduced animals on nesting islands. Nonetheless, it is currently classified under *Least Concern* in the 2009 IUCN Red List. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.



Marsh Sandpiper

Scientific name: *Tringa stagnatilis*
Family Scolopacidae
Dhivehi name: Furehdhi Ilolhi

Distribution and Habitat: The Marsh Sandpiper is fully migratory traveling between its breeding ground in Southeastern Europe and its wintering ground in Sub-Saharan Africa, Southern Asia, Indonesia and Australia. The Marsh Sandpiper inhabits warm inland wetlands; shallow freshwater or brackish marshlands, rice paddy fields, lake edges or flooded meadows. It is occasionally found on estuaries and lagoons, but is generally uncommon on coastlines.

Description: The Marsh Sandpiper has yellow-green long legs, a fine long bill and a dainty body. It has a soft grey upper body and a white neck and breast. When it is breeding, its head and neck have heavy dark brown streaks and the flanks and lower breast show bars or chevrons. The Marsh Sandpiper is carnivorous. It eats small fish, molluscs, and crustaceans, aquatic and marine insects. It usually feeds singly or in groups of less than 20.

It breeds in Eastern Europe, south west Serbia, Mongolia and north China. It nests in short marshland vegetation, solitarily or in loose colonies. Both parents share incubation and take care of the young.

Threats: Due to its large distribution, the Marsh Sandpiper is classified under *Least Concern* in the IUCN Red List for Threatened Species. Nonetheless, the species is threatened by the loss and degradation of wetland habitats through for example land reclamation, declining river flows, urbanization and pollution. Habitat loss due to agricultural intensification has seen the species disappear as a breeding bird from Eastern Europe. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Ruddy Turnstone

Scientific name: *Arenaria interpres*
Family: Scolopacidae
Dhivehi name: Rathafai

Distribution and Habitat: The Ruddy Turnstone is a migratory bird. It breeds on the northern coasts of Europe, Asia and America and then migrates to the Southern Hemisphere. When breeding, the Ruddy Turnstone inhabits boreal forest areas, swampy clearings, moorlands, marshes and bogs. Outside the breeding season, it inhabits freshwater, marine and artificial wetlands, rice-fields, ponds, mangroves or sandy coastal flats.

Description: The Ruddy Turnstone is approximately 23 cm in length. It has short orangey legs and a wedge-shaped bill with a slight up-tilt. It has a white breast with brown mottled upper parts that turn reddish brown when breeding. The brown bands on its face and neck turn black when breeding. The Ruddy Turnstone feeds day and night primarily on insects and their larvae, crustaceans, molluscs, small fish and occasionally rodents. The female builds the nest, a shallow depression in mud or on dry land lined with dense vegetation. It usually nests solitarily.

Threats: The Ruddy Turnstone is classified under *Least Concern* in the IUCN Red List for Threatened Species. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Jack Snipe

Scientific name: *Lymnocryptes minimus*
Family: Scolopacidae
Dhivehi name: Onna Ilolhi

Distribution and Habitat: The Jack Snipe is fully migratory. It has a wide global distribution breeding in boreal and Sub-Arctic Eurasia, wintering in Western and Southern Europe, Africa and Indonesia. When breeding, it inhabits forest tundra, peat bogs and marshes. Outside the breeding season it inhabits freshwater and brackish wetlands, river margins, rice-fields, flood-lands and waterlogged mudflats.

Description: The Jack Snipe is approximately 20 cm in length. Males are significantly larger than females. It has a long black tipped bill and a short tail, striking golden, brown and black striped plumage, a black stripe across the eyebrow and black stripes meeting at the ear coverts. It feeds on adult and larval insects, freshwater and terrestrial gastropods, seeds and aquatic plant matter. It nests in grassy tussocks on floating bogs and amongst bushes on drier land.

Threats: The Jack Snipe has a large distribution and is classified under *Least Concern* in the IUCN Red List. However, the species is threatened by the loss and degradation of wetland habitats. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Curlew Sandpiper

Scientific name: *Calidris ferruginea*
Family: Scolopacidae
Dhivehi name: Bon'dana Ilolhi

Distribution and Habitat: The Curlew Sandpiper is a wader of global distribution. It is fully migratory from Northeastern Serbia and Alaska in the Northern Hemisphere to Australia, Africa, India and Southeast Asia. When breeding, the Curlew Sandpiper inhabits open marshy tundra and elevated areas in the Arctic lowlands. While wintering in the Southern Hemisphere it is found in coastal brackish lagoons, salt marshes, rocky shores or inland on river banks.

Description: The Curlew Sandpiper is approximately 20 cm in length. It has a long, narrow, black bill that is slightly down-turned. It has black legs and feet. Non-breeding plumage is grey-brown above with white under parts and a white wing bar when in fight. When breeding, the plumage is red-chestnut brown and the wings are barred black. During the breeding season, the Curlew Sandpiper feeds on insects and their larvae. Outside the breeding season its diet consists of small marine invertebrates, gastropods, crustacean and bivalves. Its nest is a cup on the margins of marshes or a shallow depression on a ridge in lowland tundra.

Threats: The Curlew Sandpiper is vulnerable to habitat loss due to land reclamation and disturbance. It is classified under *Least Concern* in the IUCN Red List of Threatened Species. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Juvenile bird

Adult bird

Black-crowned Night-heron

Scientific name: *Nycticorax nycticorax*
Family: Ardeidae
Dhivehi name: Raabon'dhi

Distribution and Habitat: The Black-crowned Night-heron breeds throughout the world except in the Antarctic and Australasia. Northern populations are migratory while southern populations are not but may undergo post breeding dispersive movements. It is found in brackish, salt and fresh water habitats, rivers, salt-marshes and lagoons with aquatic vegetation for nesting and roosting.

Description: Despite its abundance, the nocturnal habit of the Black-crowned Night-heron renders it less conspicuous than other herons. It is 58 – 66 cm in length with short legs and a short neck. It has glossy black plumage that extends from its head down its back like a cape while the rest of it is white-grey. On its nape are 2/3 long white plumes. It has a black bill and crimson coloured eyes. When breeding, its yellow-green legs turn pink. Juvenile Black-crowned Night-herons are brown with pale spots. It is an opportunistic predator feeding on fish, frogs, turtles, snakes and lizards, spiders and molluscs. It also eats the eggs and chicks of other bird species. The Black-crowned Night-heron constructs a platform-like nest with sticks in trees, on cliff ledges or in bushes near water. It nests close together in single or species-mixed colonies.

Threats: The Black-crowned Night-heron is hunted and traded in Nigeria and chicks are eaten in some places. It is frequently killed at aquaculture facilities due to predation of fish and is vulnerable to habitat loss. In the IUCN Red List for Threatened Species, the Black-crowned Night-heron is classified under *Least Concern*. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Grey Heron

Scientific name: *Ardea cinerea*
Family: Ardeidae
Dhivehi name: Maakanaa

Distribution and Habitat: The Grey Heron is found throughout Europe, Africa and the Indo-Pacific. Most Palearctic populations are fully migratory whilst southern populations are either sedentary or partially migratory. The Grey Heron generally inhabits elevations from sea-level to 1,000 meters but it has even been recorded at 3,500 m in Ladakh, northwest India. It inhabits any type of shallow water- standing or flowing, saline, brackish or freshwater. As an arboreal rooster and nester, the Grey Heron likes areas with trees. It can be found inland in rivers, ponds, marshes, canals or on coastal mudflats, sandy shores and mangroves.

Description: The Grey Heron, with an outstretched neck, is 84-102 cm in length. It has a long neck and a strong pink-yellow bill. When flying, its neck is retracted (S-shaped) and its wings are bowed. Its plumage is grey above and whitish below. Adult Grey Herons have a white head with a black supercilium and black crest. The Grey Heron feeds on fish, eels, turtle hatchlings, small rodents and birds, molluscs, crustaceans, insects and plant matter. It catches its prey by standing patiently for it to approach before striking rapidly either catching it in its bill or spearing it. It constructs a flat nest of sticks in the crown of a tree. Both parents share incubation of eggs and take care of young. The Grey Heron breeds solitarily or in colonies called heronries. Successive generations often use the same breeding site.

Threats: The IUCN Red List currently classifies the Grey Heron under *Least Concern*. It has suffered population decline in the past due to competition with fishermen and fish farmers. It is vulnerable to habitat loss and loss of breeding sites. In Nigeria, the Grey Heron is traded at traditional medicinal markets.

Common Greenshank

Scientific name: *Tringa nebularia*
Family: Scolopacidae
Dhivehi name: Chon Chon Ilolhi

Distribution and Habitat: The Common Greenshank is fully migratory. It breeds in Palearctic regions and moves south during the winter to Southern Africa and islands in the Indian and Pacific Oceans. When it is breeding, the Common Greenshank inhabits boreal forests, moorlands, swampy forest clearings and open bogs. Non-breeding birds inhabit wetlands, reservoirs, mangroves, lagoons and pools on tidal reefs.

Description: The Common Greenshank is 30 – 35 cm in length. Its non-breeding plumage is grey above, white below and mottled dark grey on its head and neck. Its bill is long, green- grey in colour with an upward curve. It has long yellow-green legs. In flight, the Common Greenshank has a white rump and back and a dark outer wing. Non-breeding birds have bold black chevrons on the chest and the upper body is heavily streaked. The Common Greenshank's diet consists of insects and their larvae, molluscs and small fish. It feeds both day and night by picking from the ground surface or lunging in shallow waters. The Common Greenshank nests in a small depression on open ground. Both parents share in the incubation of eggs and caring for young.

Threats: The Common Greenshank is threatened in some regions due to habitat loss but on account of its wide distribution and population, it is classified under *Least Concern* in the IUCN Red List of Threatened Species. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Whimbrel

Scientific name: *Numenius phaeopus*
Family: Scolopacidae
Dhivehi name: Bulhithun'bi

Distribution and Habitat: The Whimbrel is fully migratory and has a global distribution. It breeds in northern regions of the Palearctic zone and migrates south for winter. Its breeding habitat is dry scrub heathland, lichen tundra, montane forest in the sub-Arctic, sub-Alpine and Boreal zones. Non-breeding birds inhabit coastal areas, rocky and sandy beaches, mangroves and lagoons.

Description: The Whimbrel is 40 – 45 cm in length. It has long pale grey legs and a dark, down-turning bill. It has white under-parts and mottled grey-brown head, back and wings. It has dark streaks along its crown and bill. When inland breeding or during migration, it feeds on adult and larval insects, slugs, seeds and berries. Non-breeding birds eat crustaceans, molluscs and small fish. It catches its prey by probing on mud surfaces with it long bill. It nests in dry exposed locations in a shallow depression in heather or grass.

Threats: The Whimbrel is classified under *Least Concern* in the IUCN Red List. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Eurasian Spoonbill

Scientific name: *Platalea leucorodia*
Family: Threskiornithidae
Dhivehi name: Dheyfaiy Dhooni

Distribution and Habitat: Palearctic breeding populations of the Eurasian Spoonbill are fully migratory while others may be resident or partially migratory with populations wintering around Africa, the Middle East and India. The Eurasian Spoonbill inhabits freshwater, brackish or saline marshes, rivers, mangroves and lakes. It prefers shallow wetlands with mud and clay substrates.

Description: The Eurasian Spoonbill is a large bird, 82 cm in length. Its plumage is all white with a yellow breast patch. Its bill is black with a yellow tip and spoon-shaped. During the breeding season it has a crest of white feathers. In flight, its legs and neck are outstretched.

It feeds on insects, dragonflies, molluscs, crustaceans, frogs and small fish. The Eurasian Spoonbill feeds by sweeping its partially opened bill from side to side while wading in water. It nests on islands in lakes and rivers or in dense vegetation and mangroves. Nests are a constructed platform of sticks and vegetation. It nests in colonies.

Threats: The Eurasian Spoonbill is threatened by habitat degradation, destruction, pollution and human exploitation of eggs. It is classified under *Least Concern* in the IUCN Red List of Threatened Species. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Black-tailed Godwit

Scientific name: *Limosa limosa*
Family name: Scolopacidae
Dhivehi name: Edhunga Ilolhi

Distribution and Habitat: The Black-tailed Godwit is a migratory bird that has a global distribution. Breeding populations have been recorded throughout Europe, as far north as Iceland to the Russian far-east with wintering populations in Southern Europe, Africa, Australia and Indonesia. When breeding, the Black-tailed Godwit inhabits areas with high grass and soft soil, moorland, cattle pastures and hayfields. Non-breeding birds inhabit fresh and saltwater areas, sandy beaches, salt-marshes, lagoons, estuaries and lake shores.

Description: The Black-tailed Godwit is 40-44 cm in length. It has a small head with a long neck and bill and long legs. When breeding, its bill is yellow-orange with a dark tip. Non-breeding birds have a yellow-pink bill. Its legs are dark grey-black. Breeding plumage is pink-chestnut while its winter plumage is more grey-brown. In flight, it has a white wing bar and rump. It feeds on adult and larval insects, molluscs, frogs, fish eggs and grasshoppers. During migration it will eat berries, rice grains and seeds. The Black-tailed Godwit nests in a shallow scrape on the ground among lush vegetation. It has a high degree of nest site fidelity- returning to its birthplace to breed.

Threats: The Black-tailed Godwit is classified under *Near Threatened* in the IUCN Red List of Threatened Species. The species has experienced serious population declines on account of changes in agricultural practices, the trampling of nests and loss of breeding sites. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Non-breeding plumage

Breeding plumage

Cattle Egret

Scientific name: *Bubulcus ibis*
Family: Ardeidae
Dhivehi name: Iruvaahudhu

Distribution and Habitat: The Cattle Egret has a global distribution. It is native to Africa, Europe and Asia, but is now found in North America, Australasia-Pacific and South America. It breeds throughout the year in the tropics, and disperses or migrates depending on food resources and seasonal rainfall. It is well adapted to terrestrial and aquatic habitats. It is commonly found in meadows, live-stock pastures, savanna or freshwater swamps, shallow marshes and mangroves.

Description: Cattle Egret is a small stocky bird approximately 51-56 cm in length. It has a thick short neck and short legs. It is entirely white with orange legs and bill and light yellow eyes. When breeding, the Cattle Egret is white with orange buff feathers on its crown and neck. The bill and legs become pink-red in colour, its eyes are bright red and it has pink-purple lores. Juvenile birds have a black bill. Its diet consists of large insects, spiders, frogs, molluscs, small birds, rodents and vegetable matter. It is known to forage in flocks and is commonly associated with grazing animals. It nests in trees, mangroves and bushes usually close to water. It nests closely in colonies, mixed-species groups or singly.

Threats: The Cattle Egret is classified under *Least Concern* in the IUCN Red List. However, it is threatened by wetland degradation and disturbance to nesting sites. The Cattle Egret is hunted and traded in traditional medicine markets in Nigeria. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Section 2

Seabirds

Brown Noddies and Great Crested Terns

Seabirds can be pelagic, coastal or even spend long periods of time inland and away from the ocean. All species are well adapted to the marine environment. This is evident by their morphology and behaviour. Some seabirds have a large wing span enabling them to glide and fly greater distances and for longer periods of time. Others have shorter wings that help when diving into the water in pursuit of prey. Most seabirds have webbed feet to assist them on the waters surface or when diving. Their feathers can be waterproof and they have more feathers than land birds which help to protect against the cold and wet. They are long-lived and have fewer young than most birds. Many seabirds are migratory, partially migratory or dispersive.

Seabirds have four main feeding techniques: surface feeding when flying or swimming, pursuit diving, plunge diving and scavenging and predation. Their diet consists of flying fish, small fish, marine invertebrates, squid, bird eggs or the catch of other birds.

In the Maldives, fishermen use seabirds to locate tuna shoals. The tuna chases small prey to the water's surface which then attracts the seabirds. An estimated 90% of tuna shoals are believed to be located in this manner.

Bridled Tern

Scientific name: *Sterna anaethetus*
Family: Laridae
Dhivehi name: Vaali

Distribution and Habitat: The Bridled Tern is distributed across tropical and sub-tropical coasts. It is partially migratory with some populations in the Indian Ocean being entirely sedentary. Non-breeding birds are entirely pelagic perching on macro algae. When breeding, it nests on vegetated coastal and continental islands, rock and coral.

Description: The Bridled Tern is 30 – 32 cm in length. Its plumage is grey above and white underneath. It has a black head with a white forehead and eyebrow. It has long slender wings and a deeply forked tail. Its bill is grey-black. It feeds on fish, squid, crustaceans, molluscs and aquatic insects. The nest is a scrape or depressions in sand under bushes, in natural cavities, crevices and caves.

Threats: The IUCN Red List classifies the Bridled Tern under *Least Concern* on account of its large range and population size. The species is vulnerable to the raiding of nests for eggs and oil spills. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

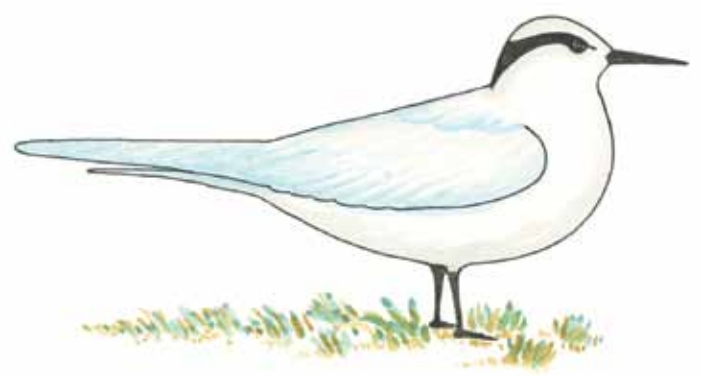
Great Crested Tern

Scientific name: *Sterna bergii*
Family: Laridae
Dhivehi name: Bodugaadhooni

Distribution and Habitat: The Great Crested Tern is found on Southeast Atlantic, Indian and Western Pacific Ocean coastlines. Most populations remain sedentary or disperse locally when breeding. It inhabits tropical and subtropical coastlines, lagoons, coral reefs, mangrove swamps, bays and estuaries.

Description: The Great Crested Tern is approximately 45 cm in length. It has white under-parts and nape with grey wings and back, and a scruffy black crest on its head. It has a pointy pale yellow bill. It feeds on fish, squid, crustaceans and insects. Its nest is a shallow scrape in bare sand, coral, rock and lagoon mudflats. It nests close together in dense colonies.

Threats: The Great Crested Tern is vulnerable to human disturbance that can lead to the desertion of nests, predation and harvesting of eggs. The IUCN Red List of Threatened Species classifies the Great Crested Tern under *Least Concern*. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.



Black-naped Tern

Scientific name: *Sterna sumatrana*
Family: Laridae
Dhivehi name: Kirudhooni

Distribution and Habitat: The Black-naped Tern is found on islands in the Indian and Western Pacific Oceans. It inhabits off-shore sand and coral cays, lagoons and sandy and rocky islands. It roosts near the waters edge on sandy beaches, rocks and spits.

Description: The Black-naped Tern is small and slender. It is approximately 30 – 32 cm in length. Adults are mainly white with a grey back and upper-wings. It has a black band that extends from the side of its head across its neck to the outer most wing feathers. The under parts can be faintly pink. It has a deeply forked tail. Its bill, legs and feet are black and its eyes dark brown. The Black-naped Tern feeds solely on fish. It forages during the day but foraging patterns are also governed by the tide. It forages by shallow plunge diving and surface-dipping. The Black-naped Tern nests in a small depression in sand, coral rubble and vegetation.

Threats: The Black-naped Tern is sensitive to human disturbance. As surface nesters, nests are vulnerable to disturbance, predation and tidal surges and flooding. The IUCN Red List classifies the Black-naped Tern under *Least Concern*. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Common Tern

Scientific name: *Sterna hirundo*
Family: Laridae
Dhivehi name: Valla

Distribution and Habitat: The Common Tern has a worldwide distribution. It is migratory, breeding throughout the temperate zone of the Northern Hemisphere and wintering in the Southern Hemisphere. When it is not breeding, the Common Tern inhabits coastal areas, lagoons, wetlands, river banks and estuaries. When breeding, it inhabits coastal and inland areas to elevations of 4,000 m above sea level.

Description: The Common Tern is characteristic for its slender body, deeply forked tail and long pointed wings. It is approximately 34 cm in length. When breeding, it has a black crown - from its bill to its nape; a white neck, grey back, wings and under-wings, and a brown rump. Its bill is red with a black tip and it has red legs. When it is not breeding, its forehead and under parts are white and its bill is black. The Common Tern's diet consists of marine fish, insects and crustaceans. It forages by diving or picking up prey on the waters surface and from mud. It nests in a shallow depression on open substrates with little or no vegetation but often placed near a vertical object for shelter.

Threats: The Common Tern is classified under *Least Concern* in the IUCN Red List. It is however vulnerable to habitat destruction, flooding of nest sites and predation. It is hunted for its commercial value in the Caribbean. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Sooty Tern

Scientific name: *Sterna fuscata*
Family: Laridae
Dhivehi name: Beyn'du

Distribution and Habitat: The Sooty Tern is found in the tropical and sub-tropical waters of the Indian, Pacific and Atlantic Oceans. The Sooty Tern is pelagic and usually comes onshore only during the breeding season during which time it inhabits coral cays, sandbanks and offshore islets.

Description: The Sooty Tern is 40 – 45 cm in length. It has distinctive features – a deeply forked tail; black upper-parts and white under-parts. It has a white forehead and a black crown, eyes, bill and legs. It feeds primarily on fish and at times crustaceans and insects. The Sooty Tern is reliant upon its prey being driven to the waters surface by predatory fish. It nests at the high water mark among low vegetation on flat, bare sand, coral grit or shell. It nests in dense colonies very close together.

Threats: The Sooty Tern is classified under *Least Concern* in the IUCN Red List of Threatened Species. Nonetheless, it is vulnerable to predation by humans and animal predators, climate change, oil spills and habitat loss. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

White Tern

Scientific name: *Gygis alba*
Family: Laridae
Dhivehi name: Dhondheeni /Kandhuvalu Dhooni

Distribution and Habitat: The White Tern is found throughout tropical and sub-tropical oceans and islands. The species is migratory or dispersive within the Southern Hemisphere.

Description: The White Tern is 28 – 33 cm in length. It is entirely white, so much so that its wings can appear translucent in flight. Some individuals can have faint ginger colouring around the head, back and wings. It has a long, slightly forked tail. Its bill and eyes are black and it has grey feet. It feeds on small fish by catching its prey on or just below the water's surface. It nests on fronds and bare branches, often scraping at bark to make a slightly concave space. The precarious choice of nesting site makes eggs susceptible to high winds.

Threats: The White Tern is classified under *Least Concern* in the IUCN Red List. However, eggs are vulnerable to adverse weather conditions and predation by other island species. This bird is protected under the *Environmental Protection and Preservation Act* (4/93) in the Maldives.

White-tailed Tropicbird

Scientific name: *Phaethon lepturus*
Family: Phaethontidae
Dhivehi name: Dhan'difulhu Dhooni

Distribution and Habitat: The White-tailed Tropicbird is found throughout the warm temperate and tropical waters of the Atlantic, Indian and Pacific Oceans.

Description: The White-tailed Tropicbird is about 74 cm in length. Its body is entirely white with distinctive black markings on the upper-wings, the anterior feathers on the edge of the wings, a black eye stripe and a yellow-red bill. It is easily identified by its two long white-tail streamers. The White-tailed Tropicbird is a pelagic plunge diver feeding on small fish, flying fish, squid and marine invertebrates. It nests in depressions in the ground on remote tropical islands. It lays just one egg that is cared for by both parents.

Threats: The White-tailed Tropicbird is classified under *Least Concern* in the IUCN Red List. Nonetheless, it is vulnerable to habitat loss and the predation of eggs by rats and other predators. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Flesh-footed Shearwater

Scientific name: *Puffinus carneipes*
Family: Procellariidae
Dhivehi name: Maahoagolhaa

Distribution and habitat: The Flesh-footed Shearwater is a pelagic trans-equatorial migrant. Breeding and non-breeding, the Flesh-footed Shearwater is found throughout the Indian and Pacific Oceans.

Description: The Flesh-footed Shearwater is a bulky bird approximately 40 - 45 cm in length. It has entirely brown-black plumage that is darker on the head, the main flight feathers and along the outer edge of the bird's wings. The tail is gently wedged or rounded. It has a large pale bill with a dark tip. It feeds by pursuit-plunging and surface seizing of squid and fish. It can dive to 4 m in depth. It nests in burrows on gentle to steep slopes in forests, grasslands and shrub lands.

Threats: The Flesh-footed Shearwater is classified under *Least Concern* in the IUCN Red List. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

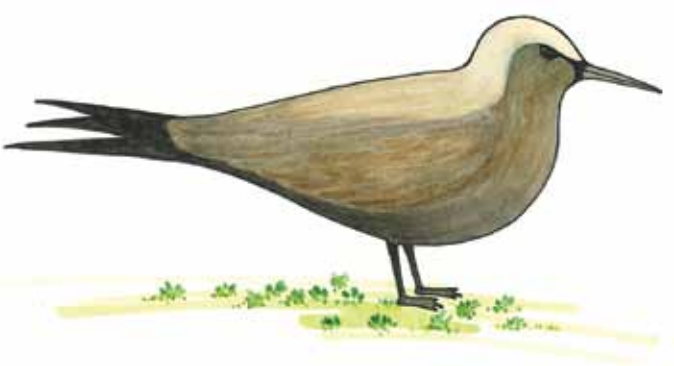
Audubon's Shearwater

Scientific name: *Puffinus Iherminieri*
Family: Procellariidae
Dhivehi name: Dhivehi Hoagulhaa

Distribution and Habitat: The Audubon's Shearwater is a tropical seabird found throughout the Indian Ocean, the Pacific, the Caribbean and Eastern Atlantic Ocean. It is found in pelagic, offshore and inshore waters.

Description: The Audubon's Shearwater is approximately 30 cm in length. Its head, back, tail, wings and under tail coverts are dark brown. The under parts are white sometimes with wing edges or the entire wing feathers brown. Its feet are pink with black toenails. Its bill is grey, darker towards the tip and down-turned. The Audubon's Shearwater feeds on fish, squid and crustaceans. It forages by plunging underwater from a swimming position or diving. It nests in depressions in sand, rock crevices and among vegetation on islands and rocky islets.

Threats: The Audubon's Shearwater is classified under *Least Concern* in the IUCN Red List of Threatened Species. Nonetheless, it is vulnerable to habitat destruction and disturbance. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.



Brown Noddy

Scientific name: *Anous stolidus*
Family: Laridae
Dhivehi name: Maaran'ga

Distribution and Habitat: The Brown Noddy is found throughout tropical and sub-tropical waters of the Atlantic, Indian and Pacific Oceans. It inhabits bare or vegetated oceanic islands and coral cays.

Description: The Brown Noddy is 36 – 45 cm in length. It is almost entirely brown with a white forehead that merges into a blue-grey cap that extends below the eyes. Its flight feathers and tail are almost black. It has a robust black bill and brown-black legs and feet. The Brown Noddy's diet consists of small fish, squid, pelagic molluscs and insects. It nests in a variety of locations - in trees and bushes, on cliff edges or bare ground. Its nest can be a simple arrangement of debris or an elaborate construction of twigs and seaweed.

Threats: The Brown Noddy is classified under *Least Concern* in the IUCN Red List. Nonetheless, some populations are threatened by predation by animals and humans. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Female Greater Frigate bird

Male Greater Frigate bird

Greater Frigate bird

Scientific name: *Fregata minor*
Family: Fregatidae
Dhivehi name: Maahoara

Distribution and Habitat: The Greater Frigate bird is found in tropical waters of the Atlantic, Indian and Pacific Oceans. It is largely sedentary. It inhabits pelagic waters, off-shore and oceanic islands.

Description: The Greater Frigate bird is a large bird, 85-105 cm in length. It is light in weight, has the highest ratio of wing area to body mass and the lowest wing loading of any bird. Its long forked tail and pointed wings held in a W shape make it easy to identify when flying.

It small legs and feet, forked tail and exceptionally large wings allow the Greater Frigate bird to fly and soar for long periods of time. It does not settle on water and should it accidentally do so, it is met with great difficulty in taking off again. Male birds are smaller than females. The male is entirely black with a green-purple tinge to its back plumage. It has a large, inflatable, red gular sac. This is enlarged during the breeding season and used to court females. The females head and dorsal plumage are black but it has a white chin, chest and belly. The Greater Frigate bird's bill is long with a hooked tip. It feeds primarily on fish and squid that it snatches from the waters surface. It is also known to prey on other seabird chicks such as the Sooty Tern and Brown Noddy and to steal food from other birds. The Greater Frigate bird nests in large colonies in bushes and trees.

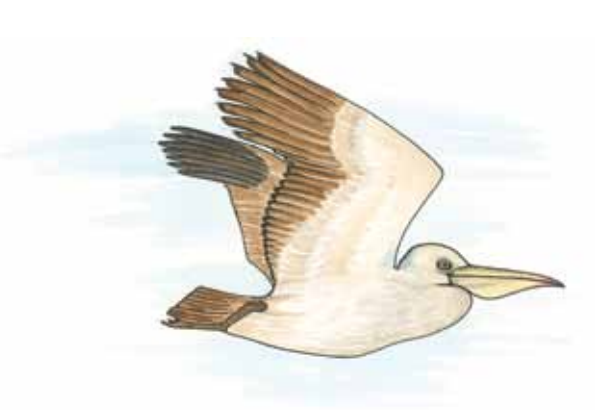
Threats: The Greater Frigate bird is classified under *Least Concern* in the IUCN Red List. Nonetheless, it is threatened by loss of nesting sites and introduced predatory species. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Section 3

Other Water Birds

There are of course many other birds not categorised as sea birds or waders that also rely upon aquatic and marine environments for survival.

Similar to other water birds they can have webbed feet to facilitate swimming, long legs for wading, long bills or expandable throat pouches for scooping fish. They share the same diet of fish, crustaceans, small insects and molluscs and nest in and around wetlands, in open or forested areas.



Spot-billed Pelican

Scientific name: *Pelecanus philippensis*
Family: Pelecanidae
Dhivehi name: Girun'baa Dhooni

Distribution and Habitat: The Spot-billed Pelican is found throughout Southern Asia. It inhabits deep and shallow wetlands, natural and man-made, open and forested, freshwater and saline. It nests in large trees and palms.

Description: The Spot-billed Pelican is 130-140 cm in length. It is white with a grey crest, neck, back and brownish tail. It has bluish markings on either side of its head. Its bill is a large pinkish pouch with pale spots. The tip of its bill is yellow-orange. The Spot-billed Pelican feeds on fish, frogs, lizards and snakes. It nests in colonies in large trees.

Threats: The Spot-billed Pelican is categorized under Near Threatened in the IUCN Red List of Threatened Species. The decline of the Spot-billed Pelican is due to the disturbance and destruction of colonies through habitat modification, loss and pollution; the loss of feeding sites, competition between birds and fishermen and the poaching of eggs and chicks by humans.

Conservation measures: The Spot-billed Pelican is granted legal protection in India, Sri Lanka, China, Myanmar, Thailand, Cambodia, Laos and the Maldives. Measures have been taken to educate people and preserve important habitats. These steps have seen a rise in Spot-billed Pelican numbers. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

White-breasted Waterhen/ Maldivian Waterhen

Scientific name: *Amaurornis phoenicurus* maldivus
Family: Rallidae
Dhivehi name: Dhivehi Kan'bili

Distribution and Habitat: The White-breasted Waterhen is found throughout Southern Asia. It prefers habitats with dense undergrowth near fresh and brackish water, mangroves, grass and shrub lands.

Description: The White-breasted Waterhen is approximately 33 cm in length. It has a short tail and long toes. Its face and belly are white. The nape, back and wings are black and it has a chestnut-red under-tail. Its bill and legs are yellow-green. In flight, the White-breasted Waterhen's legs dangle freely in the air. On land, it flattens its body to facilitate movement through the undergrowth. Its diet consists of small insects, fish, molluscs and vegetable matter. It forages on and above the ground, in bushes and small trees. The White-breasted Waterhen breeds throughout the year. It constructs a nest of twigs, stems and leaves 1 -2 m above the ground among reeds and dense undergrowth.

Threats: The White-breasted Waterhen is classified under *Least Concern* in the IUCN Red List. It has adapted well to human activity. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Section 4

Land Birds

Birds can be broadly categorised into two groups: land birds and water birds. Land birds are a very large and diverse group with the largest order of birds, Passeriformes, included. Land birds are the song birds, birds of paradise, jays, crows, ravens, finches, owls and hawks that we are all so familiar with.

Land birds feed on a variety of plant resources such as fleshy fruits, flowers (nectar), nuts, seeds and insects so they primarily inhabit areas with many trees and natural vegetation such as woodlands. Unlike water birds, land birds do not have special bills and webbed feet to facilitate wadding, swimming and foraging in aquatic habitats, nonetheless, they are attracted to areas with small water sources such as ponds and streams.

Land birds can also be migratory, traveling long distances between summer breeding grounds and winter non-breeding grounds. The preservation of stop-off sites such as forests and wetlands is therefore of great importance for the survival of not only migratory water birds, but also land birds.

House Crow/Common Crow

Scientific name: *Corvus splendens*
Family: Corvidae
Dhivehi name: Kaalhu

Distribution and Habitat: The House Crow, native to South and Southeast Asia, now has a global distribution having successfully invaded tropical and sub-tropical regions throughout the world. It has great flexibility regarding habitat and lives comfortably alongside humans and in disturbed areas.

Description: The House Crow grows up to 40 cm in length. It is slender with a long neck and large bill. It is entirely black with a defined grey 'collar' and chest. The House Crows diet consists of fruit, birds, mammals, reptiles and human waste. It is often seen scavenging among human waste. It is sedentary, often remaining in the same location its entire life. The House Crow constructs a nest of twigs high up in trees.

Threats: The House Crow is classified under *Least Concern* in the IUCN Red List. In its native range, the population of House Crows is kept in check on account of competitor bird species and predators, introduced populations can cause major problems to native wildlife and are considered a nuisance.

Asian Koel

Scientific name: *Eudynamys scolopacea*
Family: Cuculidae
Dhivehi name: Dhivehi koveli

Distribution and Habitat: The Asian Koel is found throughout South and Southeast Asia and Australia. It inhabits tall trees and is common is sub-urban areas.

Description: The Asian Koel is 39 – 46 cm in length. The male species has glossy black plumage with a green blue tinge and a red eye. Its bill is pale grey and sharply hooked. It has grey legs and feet. The female has a black crown and white under parts with fine black markings. The Asian Koel remains in the tree canopy feeding on fruit, especially figs. It is also known to eat insects, caterpillars, eggs and small vertebrates. As a brood parasite, it does not construct its own nest. Instead, it lays a single egg in another bird's nest which when hatched, forces the other chicks and eggs out. As a member of the Cuckoo family, the male birds have a distinctive 'koo-Ooo' call.

Threats: The Asian Koel is classified under *Least Concern* in the IUCN Red List. This bird is protected under the *Environmental Protection and Preservation Act* (Law 4/93) in the Maldives.

Section 5

Terminology

Arboreal – living in or among trees

Bill – the beak of the bird

Boreal – of or relating to the forest areas of the northern temperate region

Carapace – a hard bony or chitinous outer covering i.e. the dorsal plates of a turtle, crabs

Crest – a tuft or growth of feathers, fur or skin on the top of the head of some birds, reptiles and animals i.e. the Grey Heron

Crustacean – a mainly aquatic arthropod with a segmented body and a carapace i.e. lobster, crab

Larval – adj. of larva, newly hatched, wingless and wormlike form of many insects before metamorphosis

Lichen – an organism formed through the symbiotic relationship of a fungus and algae and occurs like crust-like or branching growths on tree trunks and bare ground

Lore – the space between the eye and the base of the bill of a bird

Mollusc – an invertebrate with an unsegmented body often in a shell i.e. snail, slug, mussel

Montane – of, growing in or inhabiting mountain areas

Palearctic ecozone – is the largest ecozone that includes mostly boreal and temperate climate ecoregions of Europe, Asia north of the Himalaya, Northern Africa and the northern and central parts of the Arabian Peninsula

Pelagic – of or relating to the open sea

Supercilium – the eyebrow or area of the eyebrow

Further Reading: Useful Sites

- Integrated Taxonomic Information System http://www.itis.gov/
- Global Biodiversity Information Facility http://www.gbif.org/
- The International Union for Conservation of Nature http://www.iucn.org/
- IUCN Red List of Threatened Species http://www.iucn.org/about/work/programmes/species/red_list/search_iucn_red_list/
- Catalogue of life http://www.catalogueoflife.org/search.php
- Biodiversity Heritage Library http://www.biodiversitylibrary.org/
- Ministry of Housing, Transport and Environment http://www.environment.gov.mv/
- BirdLife International Database http://www.birdlife.org/datazone/species/
- Birds in back yards http://www.birdsinbackyards.net/
- The Life of Birds http://www.pbs.org/lifeofbirds
- http://www.birdlist.org/maldives.htm
- http://avibase.bsc-eoc.org/.
- Avibase The World Bird Database http://avibase.bsc-eoc.org/
- For further information on Maldives wildlife from Live & Learn Environmental Education see Life on the Beach, Maldives & Common Plants of Maldives.

References

American Bird Conservancy 'Global Warming Threatens Many Bird Species' http://www.abcbirds.org/conservationissues/globalwarming/global_warming_factsheet.pdf (accessed 12.3.2010

Birds in back yards http://www.birdsinbackyards.net/

BirdLife International Database http://www.birdlife.org/datazone/species/

Corrigan, C. E. et al. (2006) 'Impact of Monsoon Transitions on the Physical and Optical Properties of Aerosols' Journal of Geographical Research, Vol.111, D18208, doi:10.1029/2005JD006370

http://www-ramanathan.ucsd.edu/publications/Corrigan_etal_jgr006370_2006.pdf (accessed 12.3.2010)

Crick, H. Q. P., et al (1997)'UK birds are laying eggs earlier' Nature Vol 388, http://ftp.ibiologia.unam.mx/directorio/r/d_renton/pdf/6.pdf (accessed 15.3.2010)

David Attenborough, The Life of Birds http://www.pbs.org/lifeofbirds

Kosztolany, A. et al. (2009) Breeding ecology of Kentish plover Charadrius alexandrines in an extremely hot environment, Bird study 56, 244-252

IUCN Red List of Threatened Species http://www.iucn.org/about/work/programmes/species/red_list/search_iucn_red_list/

Metz, G. et al (2002) Great Frigatebird (Fregata minor), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/681 (accessed 20.3.2010)

Ministry of Environment & Construction (2004) 'State of the Environment: Maldives' http://www.preventionweb.net/files/617_SoEMaldives2004.pdf (accessed 12.3.2010)

Pennycuick, C J. et al. (1909)'Foraging Flights of the White-Tailed Tropicbird (Phaethon lepturus): Radiotracking and Double-Labelled Water' Colonial Waterbirds, Vol. 13, No. 2, 96-102

ScienceDaily (2009) 'Bird Species Decline: Wader Populations Decline Faster Than Ever' http://www.sciencedaily.com/releases/2009/06/090606195747.htm (accessed 12.3.2010)

LIVE&LEARN
Environmental Education

Developed by Live & Learn Environmental Education, Male', Maldives

November 2010

Adapted from: Attenborough, D. *The Life of Birds*, BirdLife International & Birds in backyards

Written by: Ariane Factor and Fathimath Shafeega
Proofed by: Fathimath Shafeega, Maryam Samira Ali, Saamee Rasheed, Hasan Shakeel
Photography:
Black Crowned Night Heron, Black Tailed Godwit, Cattle Egret, Sooty Tern, Ruddy Turnstone, Great Crested Tern & Whimbrel: Brad and Lynn Weinert
White-Tailed Tropic Bird: Ahmed Saleem and Anke Hofmeister
White Tern: Mariyam Shazna
House Crow: Mohamed Mazin
Crab Plover: Elaine Glen
Koeli, Waterhen & Threat to Birds Photographs: Ali Nishan

Illustrations by: Mohamed Madeeh
Design and layout: Live & Learn Environmental Education

ACKNOWLEDGEMENTS

This Field Guide was developed with the assistance and support from many individuals: Aishath Bushry, Ariane Factor, Fathimath Shafeeqa, Jady Smith, Maryam Samira, Mariyam Shazna and Mohamed Zahir.

Information was taken from several websites including: http://www.birdlife.org/datazone/species/, http://www.birdsinbackyards.net/, http://www.pbs.org/lifeofbirds, http://avibase.bsc-eoc.org/ and http://www.erc.gov.mv/Protected%20birds%20of%20Maldives/index.htm.

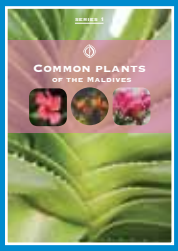
SERIES 1

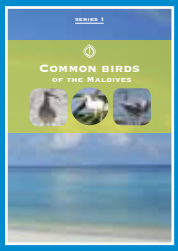
Common Birds of the Maldives

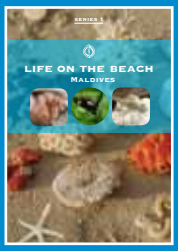
Birds are magnificent creatures that display an astonishing diversity in colour, size, shape and character. *Common Birds of the Maldives* will introduce you to the Maldivian environment and the avifauna within. For each species you will find information about distribution, habitat and population status with photographs and illustrations to facilitate identification. There are tips and information to get you outdoors, bird watching and experiencing the Maldivian environment first-hand. Whether you're in the forest or sitting on a deck-chair, birds can be a delight to see and hear.

BOOKS IN THIS SERIES ARE:

Common Plants of the Maldives,
Common Birds of the Maldives and *Life on the Beach, Maldives*.







LIVE&LEARN
Environmental Education

www.livelearn.org