



## Unit 4

# Wonder world of birds



Write the names of the birds seen in your locality.

Hen , duck ,crow, parrot, pigeon , mynah, cuckoo, sparrow, peacock, wood pecker , king fisher, owl, kite, crane etc.

Observe the pictures of birds. Name them.



**Parrot**



**Wood pecker**



**King fisher**



**Crane**



**Owl**



**crow pheasant  
(chemboth)**



**Kite**



**Mynah**



**Hornbill**

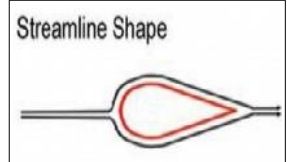


**cuckoo**

## What are the common characteristics of birds?

- ◆ Birds have feathers on their body.
- ◆ They lay eggs.
- ◆ Birds have beaks. They do not have teeth.
- ◆ They have two legs.
- ◆ They have wings and tail. Many of them can fly.
- ◆ They make nest.
- ◆ Birds (like fish) have stream lined shape. It helps birds to move easier in air.
- ◆ Birds have hollow bones. (think of a straw). This make their bones light and help them to fly.

• Streamlined body



**hollow bones**

## Flightless birds.

Flightless birds are birds which cannot fly.



**Ostrich**



**Emu**



**Kiwi**



**cassowary**



**Rhea**



**Penguin**

## Nest makers

**Birds make nest in different places in different style.**

Where do birds build nest ?

**1. On tree top branches or on tree top or in tree trunks.**



**crow**



**Babblers .**  
പുത്താകിരി



**Oriole**  
മഞ്ഞകിളി





**Kite**  
പരുന്ത്



**Indian Tree pie.**  
ഓലേഞ്ഞാലി



**Pond heron.**  
കുളക്കൊക്ക്

## 2. In holes on tree trunk.



**parrot**



**Wood pecker**  
മരം കൊത്തി



**Barbet**  
കുട്ടുരുവൻ



**Mynah**



**Hoopoe.**  
ഉഷ്പുഷ്പൻ



**Hornbill**  
വേഴാമ്പൽ



**Magpie Robin**  
മണ്ണാത്തിപ്പുള്ളി

## 3. The tailor bird makes their nests by folding long leaves.



**Tailor Bird** തുന്നാരൻ

#### 4. among bamboos.



**Weaver birds' nest**  
ആറ്റക്കുരുവി



**Cattle Egret**  
പെരുമുണ്ടി

#### 5. in burrows



**Owl**



**King fisher**

#### 6. In the cracks of rocks



**Ashy Crowned Sparrow**  
കരിവയറൻ  
വാമ്പാടി



**Bush lark**  
ചെമ്പൻപാടി



**swift**  
ശരപ്പക്ഷി



**Malabar whistling thrush**



## 7.On buildings



**Pigeon**



**House Sparrow**  
അങ്ങാടിക്കുരുവി



**Robin**  
മണ്ണാത്തിപ്പൂക്കു

## 8.on ground



**Quail**  
കാടകൾ



**Grey jungle fowl**  
കാട്ടുകോഴി

## 9.Some water birds builds floating nest



**Jacana**താമരക്കോഴി



**Wild Duck**കാട്ടു താറാവ്

## What things do birds use to build nests?

- ◆ Fibres
- ◆ dry twigs
- ◆ straw
- ◆ grass
- ◆ feathers dropped by other birds.
- ◆ mud
- ◆ cotton
- ◆ spiders' silk
- ◆ small pieces of clothes etc.





## Why do birds build nests?

- ◆ Birds build nests to lay eggs.
- ◆ to look after their eggs till they hatch.
- ◆ to rear their young ones.
- ◆ to protect themselves and their young ones from enemies.

## Birds that do not make nest

**Cuckoos** never make their own nests. They lay eggs in crow's nests. It does not look after its young ones.

Many birds do not have the habit of building nests. Some birds lay eggs in nest left by other birds.

## What are migratory birds?

- ◆ Some species of birds travel from one place to distant lands in search of food, breeding and shelter from adverse weather conditions.
- ◆ They travel in flocks(group).
- ◆ After the purpose of journey they return to their native place. Such birds are called migratory birds.
- ◆ This phenomenon (പ്രതിഭാസം) is called migration(ഭേദഗതം).
- ◆



**Paradise flycatcher.**  
(Naakamohan)



**Wagtail** (വാലുകലുക്കി)



**Sand piper**  
മണൽപ്പുള്ളികൾ



**Golden Oriole**(മഞ്ഞക്കിളി)



**Arctictern**  
(ആർട്ടിക് ടേൺ)



**Whimbrel**  
തെറ്റിക്കൊക്ക്

## Some migratory birds found in Kerala



**Greater flamingos.**



**Pelicans**



**Gulls**



Spot billed duck  
പുള്ളിച്ചുണ്ടൻ താറാവ്



Lesser whistling duck  
ചെറിയ ചൂളാൻ എരണ്ട.



Indian pond heron  
കുളക്കൊക്ക്

### **Arctic tern**

- \* It makes a longer annual migration than any other bird.
- \* Every year it flies from the Arctic to Antarctica and then back again .
- \* Its' polar migration allows it to experience two summer per year.
- \* They observe the sun at daytime and stars at night to detect their direction.
- \* They are carnivores.
- \* They make their nests on the ground.

### **Ostrich**

- \* **Flightless bird.**
- \* **The worlds' largest and heaviest living bird.**
- \* **They have largest eye of any land animal.**
- \* **Ostrich eggs are the largest of all eggs.**
- \* **It is the only bird that has two toes on each foot.**
- \* **They are omnivores.**
- \* **It is the fastest running bird.**



**Toes of  
Ostrich**



**\*The great hornbill is the state bird of Kerala and Arunachal Pradesh.**

**\*The great Indian hornbill is a social bird.  
It travels in pairs.**

**\*Hornbills are omnivorous birds, eating fruit, insects and small animals.**



**\*The female hornbill lays her eggs in a hole in a tree.  
Then, helped by her mate, she seals herself in,  
covering the entrance with droppings and mud.  
Only a small slit is left, through which the male gives her food.  
This keeps the nest safe from snakes until the chicks are grown  
enough to leave the nest, and learn how to fly.**

**\*The wing beats are heavy and the sound produced by  
birds in flight can be heard from a distance.  
This sound has been likened to the  
puffing of a steam locomotive starting up.**

## **Can travel and catch prey.**

**Birds have special features (adaptations) in their body  
to move about and catch prey.**

- ◆ Flying birds have large chest muscles that move the wings.
- ◆ Birds have **feathers** that help them fly.
- ◆ The long flight **feathers** on the wings and **tail** help birds **balance** and steer.
- ◆ The size and shape of the beaks and legs are different in different birds.

**Look at the pictures of some birds and identify them.**



**Curlew**  
വാൾക്കൊക്ക്



**Hummingbird**  
തേൻകുരുവി



**Wild duck.**  
കാട്ടുതാറാവ്



**Pelican**  
വർണക്കൊക്ക്



**Bronze Winged  
Jacana** താമരക്കോഴി



**Rose-ringed parakeet**  
മോതിരത്ത

**What are the special features which enable these birds to move and to catch prey?**

Birds	Physical features	adaptations
Curlew	long and down curved beak.  Long leg.	Its beak help to catch worms and other deep-burrowing prey such as shrimp and crabs . Long leg help to stand in water without wetting its body.
Humming bird	long narrow and tube like beak.  body is light.	It help them to feed on nectar from flowers.

	It can rotate its wings in all directions.	It can remain in air and suck nectar. It can fly both forward and backward and change directions quickly.
Wild duck	Boat like shape. Wings are long and strong  Webbed feet .	Helps fly in air. When it flies the legs can be folded and held closely to its body.  Help to swim.
Pelican	Long neck and long beak	Help to catch fish from under the water without dipping its head in water.
Bronze winged jacana .	long leg and very long toes. <i>It is the bird with the longest toes.</i>	It helps to walk on floating leaves. <b>The super-long toes spread the bird's weight over a large area of floating leaves</b>
Rose Ringed Parakeet	toes are flexible and positioned in opposing pairs. <b>(two toes forward and two toes backward)</b>  They have strong hooked beaks.	Help to get grip on the branches. Helps to hold fruits and nuts . They use bill like a third foot when climbing. Beaks are strong to crack hard shells of seeds.





## What are the peculiarities of the eagle?

### How do these peculiarities enable the eagle to catch prey?

- ◆ It has a strong sharp and hooked beak . It helps to tear the flesh of prey.
- ◆ Its' legs are very strong.
- ◆ It has sharp curved claws. They help hold the prey and keep it under control.
- ◆ It has long and strong wings to fly high carrying the prey.
- ◆ They have sharp eyesight. It helps them to see the prey easily.













### What are the adaptations of wood peckers to catch prey?

- ◆ They can sit horizontal on a trunk of the tree. Its toes help to get grip on the tree trunk.
- ◆ Their tail feathers rest in force to against the tree bark.
- ◆ They have strong beak to peck at the hard bark to catch its prey.









### Beaks and legs.

- ◆ The shape and size of a *bird's beak* can tell us what it eats .

Bird	Beak	Shape of the beak	Purpose of the beak
Eagle 		It has a strong, sharp and hooked beak	This shape helps eagle to catch animals as it flies.
Parrot 		It has a sharp and curved beak	This shape helps crack nuts and seeds and to tear fruits.
Duck 		It has a flat and broad beak.	This shape helps it to catch fish and worms in the water.
Sparrow 		It has a small pointed beak.	This shape helps it to pick small grains.
Hummingbird 		It has a straw-like, long and slender beak.	This shape helps it to suck nectar from flowers.



The legs and toes of birds are suitable for their way of life

Shape of Bird Foot	Type of Bird Foot	Adaptation and Lifestyle
	Climbing	Feet like these help birds, like woodpeckers, climb trees. Notice the sharp nails for digging into the wood, and the back toes so that the bird doesn't topple backward.
	Swimming	Webbed feet help birds, like ducks, paddle through the water more efficiently.
	Running	For running quickly, birds like emus, often have three toes, all of which face forward.
	Perching	Feet with four toes, one of which is in the back, are useful for perching on tree branches. Birds, like blue jays, wrap their toes around the branch to help balance.
	Grasping	Predatory birds, like hawks, have clawlike feet called <i>talons</i> for grabbing their prey.
	Scratching	Chickens, and other birds that scratch in the dirt for insects, usually have feet with four toes, all of which have strong nails for digging into the ground.

## Birds and environment

**Birds are useful in many ways.**

- \* Preying birds like owl and eagle prevent the increase of rats.
- \* Birds help in dispersal of seeds. They maintain biodiversity.
- \* Some birds help to control pests. Birds like crow pheasant, mynah etc.. feed on pest.
- \* Crows and vultures, domestic birds etc. are helpful in cleaning the environment by eating decayed substances and dead organisms.
- \* Some birds help in pollination.

**The number of birds that are beneficial to the environment is decreasing. What could be the reason for this?**

- ◆ Excessive use of pesticides.
- ◆ Deforestation.
- ◆ Loss of living places.
- ◆ Climate change/ global warming.
- ◆ Pollution of the environment.
- ◆ birds are hunted for food,sport etc.
- ◆ Wild fire.



## **It is our duty to protect birds. How can we do that?**

**We should stop hunting the birds for fun. We should control pollution. We should stop deforestation. We should cultivate an attitude in ourselves that even the birds have the right to live in this earth just as we do. Remember, it is our own necessity to protect the birds. We should provide an atmosphere where birds can live without fear.**

### **House sparrow**

It is a small bird. It is strongly associated with human habitation. It feeds mostly on the seeds of grains and weeds. So we can find it in markets, especially in and around grocery shops. They feed on insects also.



**But now they are fast disappearing from our markets.**

**What are the reasons for the decline of house sparrows?**

➤ **Shortage of nesting place:**

Thatched roof buildings were suitable places for sparrows to build nests. Concrete buildings have reduced resting places for sparrows.

➤ **Environmental pollution .**

Noise pollution, air pollution, mobile radiation etc..

➤ **decrease in the availability of food**

The grains were used to pack in gunny bags. Sparrows fed on spilled things. Grain spilled by careless handling in and around the store attracted birds. Now they are packed in plastic bags and cardboard etc.. to avoid spilling of items.



- \*The world sparrow day is observed on march 20 every year.**
- \*The first World Sparrow Day was celebrated on 20 March 2010 .**
- \*After that, every year this day is celebrated all over the world.**
- \*Every year celebration is organised according to the theme.**

**World Sparrow Day 2020:  
Theme  
"I LOVE Sparrows"**



**Why do we rear birds?**

**\*As pets , \* for egg , \* for meat , \* for fertilizers , \* for entertainment,\* for an income \*for feathers.**

**Prepared by:  
Raji Philip. Govt. UPS Kuttur.**