

ORDER 1
TINAMIFORMES

ORDER 2 RHEIFORMES Eg. Rhea

ORDER 3
STRUTHIONIFORME
S
Eg. Ostrich

ORDER 4
CASUARIFORMES
Eg. Emu,
Cassowary

ORDER 5
AEPYORNITHIFORM
ES
Eg. Elephant birds

ORDER 6
DINORNITHIFOR
MES
Eg. Moa\*, Kiwi

ORDER 7
PODICIPEDIFORM
ES
Eg. Grebe

ORDER 9
PROCELLARIIFOR
MES
Eg. Albatross,
Petrel

ORDER 10
PELECANIFORME
S
Eg. Pelican,
Cormorant

ORDER 11 CICONIIFORMES Eg. Stork, Heron, Flamingo, Crovus

ORDER 12 ANSERIFORMES Eg. Duck, Swan

ORDER 13
FALCONIFORMES
Eg. Eagle, Vulture,

Milvus (Kite)

ORDER 14
GALLIFORMES
Eg. Fowl,
Pheasant,
Grouse Turkey

ORDER 15
GRUIFORMES
Eg. Coot, Crane

ORDER 16 CHARADRIIFORME S Eg. Curlew, Snipe, Woodcock, Gull

ORDER 17
GAVIIFORMES
Eg. Diver

ORDER 18
COLUMBIFORMES
Eg. Pigeon, Dodo\*

ORDER 19 CUCULIFORMES Eg. Cuckoo ORDER 20 PSITTACIFORMES Eg. Parrot

ORDER 21 STRIGIFORMES Eg. Owl

ORDER 22 CAPRIMULGIFORM ES Eg. Nightjar

ORDER 23
APODIFORMES
Eg. Swift,

ORDER 24
COLIIFORMES
Eg. Mousebird

ORDER 25
TROGONIFORME
S
Eg. Trogon

ORDER 26 CORACIIFORMES Eg. Kingfisher

ORDER 27
PICIFORMES
Eg.

<u>Dryobates</u> <u>scalaris ( Wood</u> <u>Pecker)</u>

ORDER 28
PASSERIFORMES
Eg. Crow,
Sparrow,
Warbler, Robin,
Finch

Go to : Class Aves

Go to : Orders

# Dryobates scalaris (Wood Pecker)

**Common name:** ladder backed wood pecker

<u>Geographical distribution</u>: The ladder-backed woodpecker is fairly common in dry brushy areas and thickets and has a rather large range. The species can be found year-round over the southwestern United States, most of Mexico, and locally in Central America as far south as Nicaragua.

## Scientific justification and classification;

**Phylum-Chordata-** The prescence of a notochord.

**Subphylum-Vertebrata:** Notochord replaced by vertebral column.

**Superclass- Gnathostoma:** Jawed vertebrates

Class: Aves-commonly known as birds, worm-blooded with an exoskeleton of feathers,

Body usually spindle shaped, with four divisions: head, neck, trunk, and tail;

neck disproportionately long for balancing and food gathering.

**Subclass:** Neornithes-all modern birds, characterized by many adaptations for flight, such as a four-chambered heart and feathers, and differentiated from other, older birds by having a beak with no teeth.

**Superaorder:** Neonathae- a group defined on the basis of palate structure,

with a mobile palate and some bones reduced

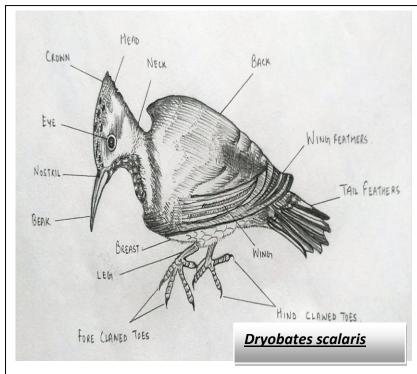
**Order:** Piciformes-have strong, heavy bills. Bills are similar to beaks.

All Piciformes are good at climbing, although the honeyguides are the only good flyers.

Genus: Detonates.



- It is a small woodpecker about 16.5 to 19 cm ( $6\frac{1}{2}$  to  $7\frac{1}{2}$  inches) in length.
- It is primarily colored black and white, with a barred pattern on its back and wings resembling the rungs of a ladder.
- Its rump is speckled with black, as are its cream-colored underparts on the breast and flanks.
- Southern populations have duskier buff breasts and distinctly smaller bills.
- Adult males have a red crown patch that is smaller in immatures and lacking in adult females.
- It is very similar in appearance to Nuttall's woodpecker, but has much less black on its head and upper back, and the range of the two species only intersects a minimal amount in southern California and northern Baja California. Hybrids are known.
- It nests in cavities excavated from tree trunks, or in more arid environments a large cactus will do.
- The female lays between 2 and 7 eggs, which are plain white.
- The eggs are incubated by both sexes.
- Like most other woodpeckers the ladder-backed woodpecker bores into tree-trunks with its chisel-like bill to hunt for insects and their larva, but it also feeds on fruit produced by cacti.



# Milvus (Kite)

Go to: Class Aves

Go to : Orders

Common name: Kite

Geographical distribution: Europe, Asia, Africa and Australia. The temperate populations of

this kite tend to be migratory while the tropical ones are resident.

### Scientific classification and distribution:

**Phylum: Chordata**: the presence of notochord.

**subphylum**: **vertebrata:** Notochord replaced by vertebral column

**Superclass**: **Gnathostomata**: Jawed vertebrates

Class: Aves: Endothermic vertebrates, characterised by feathers, toothless beaked jaws,

hard shelled eggs, high metabolic rates, four chambered heart and lightweight skeleton.

Superclass: Neornithes::Birds are unique in having feathers, which enable flight, provide

insulation, and are used in visual communication.

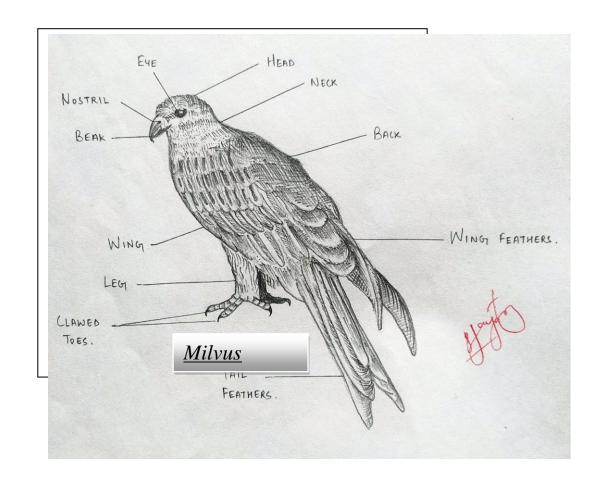
Superorder: Neognathae: contains the tinamous and the flightless ratites

Order: falconiformes: beak short and curved at tip;mandibles sharp-edged;feet with sharp

edged claws; diurnal and strong fliers



- •Brown in colour. Size grows upto 60 cm.
- Tail is forked, a distinguishing character from similar birds.
- They have hooked beaks which are very sharp and designated for tearing meat.
- •The bright yellow legs and feet can often be seen in flight. Strong clawed feet.
- •Retina contains mainly cones.
- •No sexual dimorphism.



# <u>Bubo</u>

**Common name:** Owl, In Hindi it is known as Ghughu or ulloo.

Geographical distribution: Bubo bubo has world-wide distribution, specially found in India, Pakistan and Myanmar.

# Scientific justification and classification;

**Phylum-Chordata-** The prescence of a notochord.

**Subphylum-Vertebrata:** Notochord replaced by vertebral column.

**Superclass- Gnathostoma:** Jawed vertebrates

Class: Aves-commonly known as birds, worm-blooded with an exoskeleton of feathers,

Body usually spindle shaped, with four divisions: head, neck, trunk, and tail;

neck disproportionately long for balancing and food gathering.

**Subclass:** Neornithes-all modern birds, characterized by many adaptations for flight, such as a four-chambered heart and feathers, and differentiated from other, older birds by having a beak with no teeth.

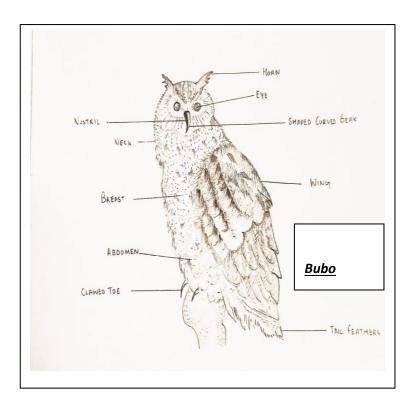
**Superorder**: **Neognathae:**contains the tinamous and the flightless ratites

Order: Strigiformes- Head large, Rounded

Genus: Bubo



- Commonly called the great horned owl. In Hindi it is known as Ghughu or ulloo.
- It is a fierce looking large owl with large rounded head, huge orange gold eyes and long horns or ears and nostril. Plumage soft textured.
- Body divided into head, back, neck, breast and abdomen.
- Owls have 14 neck vertebrae compared to seven in humans, which makes their necks more flexible.
- Bird is heavily built with dark brown back mottled and spotted with buff. The dark brown underside is streaked. Beak is short, sharp and curved and adapted for tearing and piercing.
- Eyes are large, yellow and forwardly directed, each in a disk of radial feathers. Wings folded over the body.
- Their facial discs help owls to funnel the sound of prey to their ears. In many species, these discs are placed asymmetrically, for better directional location.
- Ear opening large, often with flap-like cover, sometimes asymmetrical.
- Legs are fully feathered. Feet adapted claws sharp.
- Females owls are typically larger than the males
- Nesting season November to April.
- Most owls share an innate ability to fly almost silently and also more slowly in comparison to other birds of prey
- A group of owls is called a "parliament."



# <u>Alcedo</u>

Common name: Kingfisher

Geographical distribution: widely distributed over Europe, Asia, and North Africa, mainly of 60 degree north.

**Phylum:** Chordata: The presence of a notochord.

**Subphylum: Vertebrata:** Notochord replaced by vertebral column.

**Superclass:** Gnathostomata: Jawed vertebrates

**Class**: **Aves:** Endothermic vertebrates, characterised by feathers

,toothless beaked jaws,hard shelled eggs,high metabolic rates,four chambered heart and lightweight skeleton.

Subclass: Neornithes: Birds are unique in having feathers, which enable flight, provide insulation,

and are used in visual communication.

Superorder: Neognathae:contains the tinamous and the flightless ratites

**Order: Coraciformes**: Tropical bright coloured birds.



- •Kingfishers are very bright coloured. The colour of their wings is a blue\green colour.

  Their underparts are bright orange and they have a small, white bib underneath their beaks, on their throats.
- •They have large heads, long ,sharp,pointed bills,short orange coloured legs, and stubby tails
- •The kingfishers head is blue with orange marks in front and behind the birds eyes and a white mark on each side of head.
- Four toes, three of which are forward pointing. Syndactylous toes, with third and fourth partially fused together.
- •Excellent vision.
- •Feed on a wide variety of prey. They are most famous for hunting and eating fish.

# **Additional resources:**

https://youtu.be/veQ2ilQrzMU



# Psilopogon haemacephalus

**Common name:** Coppersmith barbet

**Geographical Distribution**: *Psilopogon* are distributed all over Indian Subcontinent and South East Asia i.e. Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka, Myanmar, Thailand, Combodia, Laos, Veitnam, China, Malasyia, Singapore, Indonesia and Phillippines.

#### **Scientific Classification with Justification:**

**Phylum:** Chordata: The presence of a notochord.

**Subphylum:** Vertebrata: Notochord replaced by Vertebral Column.

**Superclass:** Gnathostomata: Jawed Vertebrates

Class: Aves: Exoskeleton of feathers, forelimbs, modified into wings, jaws modified into a toothless beak.

**Subclass: Neornithes:** Sternum with kneel, caudal vertebrae fused to form pygostyle.

Suborder: Neognathae: Modern birds with power of flight, New jaw formed by teeth without beak,

feather with barbs, barbules and hooklets.

Order: Piciformes: Have zygodactyl feet—two toes forward and two back, are being

able to digest beeswax **Genus**: *Psilopogon* 



- Body measures 15 to 17 cm in length and divided into head, neck, body and tail.
- This is a green coloured bird with crimson coloured forehead and breast.
- It has a very distinct call which is more likely the **sound made when the coppersmith strikes the metal with hammer.**
- It has distinct colours throughout its body with red forehead, yellow coloured eye ring and throat patch with streaks underside and upper parts are coloured green.
- Both males and females are alike.
- Juveniles look duller and don't have red patches.
- It is best known for its metronomic call.
- Like other barbets, they build their nest by chiselling out a hole inside a tree.
- During the nesting season, the abrasion on the feathers can make the plumage of the upper back to appear bluish.
- They are mostly frugivores (eat only fruits)



Psilopogon

## **Dicurus**

Common name: Drongo

Geographical Distribution: common and widespread resident breeder in Africa south of the Sahara.

They are found in arid climates.

#### **Scientific Classification with Justification:**

**Phylum:** Chordata: The presence of a notochord.

**Subphylum:** Vertebrata: Notochord replaced by Vertebral Column.

**Superclass: Gnathostomata:** Jawed Vertebrates

Class: Aves: Exoskeleton of feathers, forelimbs modified into wings, jaws modified into toothless beaks Subclass: Neornithes: Sternum with keel, caudal vertebrae fused to form pygostyle, and claws in the forelimbs absent

Superorder: Neognathae: Modern birds with power of flight, feathers with barbs, barbules and

hooklets. Pygostyle and sternum present

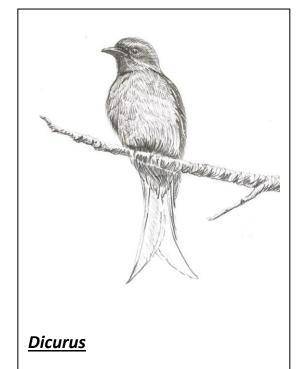
Order: Passeriformes: Perching birds as have three toes forward and one behind and the sole is covered

with rough bumpy skin

Genus: Dicurus



- Feathers are black and body weight is 48-53 grams and is 23-26cm in size. Legs are short.
- Males are mainly glossy black, although their wings are duller. Females are less glossy.
- It is large-headed with well-developed rictal and nasal bristles, which are used as sensory organs.
- The rectrices curve outwards, forming the forked tail for which it is named fork tailed Drongo.
- The hooked bill is black and heavy, and the eye is red.
- The call is a metallic strink-strink. Vocal at dawn and dusk. They are capable of using
- deceptive mimicked alarm calls to steal food from birds and animals such as meerkats.
- Two to four eggs are laid in a nest high in a tree.
- Still-hunt by sitting very upright on a prominent perch dauntlessly. Terrestrial foragers like babblers may use the Drongo as a sentry/guard.
- They are almost exclusively carnivorous, but may take nectar when available.
- Their habit of driving away predators from near their nests is believed to encourage other birds especially bulbuls, to nest in the vicinity. Rare interspecific feeding where a red-vented bulbul feeds the chicks of a black Drongo at their nest has been recorded.
- Farmers attract them to their fields using artificial perches in fields to encourage them to feed on pest insects.



#### **Additional Resources:**

- https://youtu.be/tEYCjJqr21A
- https://youtu.be/yGX7efXPCvg
- https://youtu.be/SOA6HLASw 0

# **Crovus**

Common name: Crow

Kauwa or kag in Hindi.

**Geographical Distribution**: Corvus splendens is found everywhere in India. It is the most common, most familiar, most intelligent and boldest bird, living on trees in towns, villages and gardens. Always around human habitat.



#### **Scientific Classification with Justification:**

**Phylum:** Chordata: The presence of a notochord.

**Subphylum:** Vertebrata: Notochord replaced by Vertebral Column.

**Superclass:** Gnathostomata: Jawed Vertebrates

Class: Aves: Exoskeleton of feathers, forelimbs modified into wings, jaws modified into toothless beaks

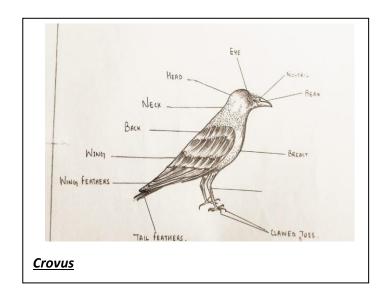
Subclass: Neornithes: Sternum with keel, caudal vertebrae fused to form pygostyle, and claws in the forelimbs absent

Superorder: Neognathae: Modern birds with power of flight, feathers with barbs, barbules and hooklets. Pygostyle and sternum present

Order: Ciconiiformes (Long legged and long necked wading birds).

Genus: Crovus

- Common house crow, called Kauwa or kag in Hindi.
- Adult crow 32 to 42 cm in length.
- Body divisible into head, neck back breast and abdomen. Head contains paired eyes and beak.
- Beak adapted for tearing and cutting.
- Neck and breast, grey, but back and plumage are glossy black.
- Eyes are large and beak stout and elongated.
- Tail feathers are elongated. Wing feathers folded dorsolaterally.
- Feet adapted for perching. 3 toes in front and 1 behind.



# <u>Anas</u>

**Common name: Duck** 

**Geographical Distribution:** 

#### **Scientific Classification with Justification:**

**Phylum: Chordata:** The presence of a notochord.

Subphylum: Vertebrata: Notochord replaced by Vertebral Column.

**Superclass: Gnathostomata:** Jawed Vertebrates

Class: Aves: Exoskeleton of feathers, forelimbs modified into wings, jaws modified

into toothless beaks

Subclass: Neornithes: Sternum with keel, caudal vertebrae fused to form pygostyle,

and claws in the forelimbs absent

Superorder: Neognathae: Modern birds with power of flight, feathers with barbs, barbules

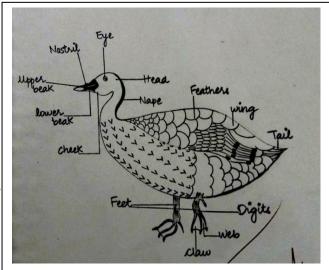
and hooklets. Pygostyle and sternum present

**Order:** Anseriformes:

Genus: Anas



- Crown-The crown is the very top part of a duck's head. Crown looks like a solid colour, iridescent sheen, or any mottling or striations. The shape of the crown is flatter or more peaked and steeply the crown slopes down to the bird's bill.
- Bill-A duck's bill is used to filter food out of the water. The shape of the bill is a flattened spatulate shape.
- Nail-On the bill, the Ducks have a slightly thicker tip, called the nail. This feature allows them to root through mud or grass to find food, and the nail is more prominent or maybe a different colour than the rest of the bill in some duck species.
- Throat-The front part of the neck is the throat of the bird. At the base of the neck or for an overall iridescent sheen, there is a ring that can set the neck apart from the remainder of the plumage.
- Auriculars-The cheeks of a bird are called auriculars, and in some species, these small, fine feathers have a different colour to the rest of the face.
- Wing The wings can provide great clues for proper identification, including when folded while a duck is perched or swimming.
- Leg-Most ducks have relatively short legs, but whistling-ducks have much longer legs, and identification
- can help with that length.
- Duck claws/ Foot-According to how the birds use their feet, the structure and size of the toes and the size and shape of their claws vary. To provide more surface to press against the water, ducks use their webbed feet like paddles.
- Rump-Duck rumps are frequently covered by wings that are folded.
- Tail -Most ducks have relatively short tails, but great identifying clues can be the overall colour and any spotting or barring.
- Speculum-Many species of duck have a vivid speculum, which on each wing is a patch of iridescent secondary feathers. The speculum can be clearly seen while the bird is in flight, but when the wings are folded, it can be partially or fully obscured.



Anas