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Driven by a desire to inspire others, Anusha began writing this book to bridge the gap between curiosity and knowledge, offering readers a fresh perspective on wildlife. When not writing, Anusha enjoys reading books, trekking, photography and always looking for new opportunities to connect with nature and share its wonders with others.

Wildlife Doppelgangers: A Closer Look at Nature's Twins



Anusha M

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**CENTRAL ACADEMY FOR STATE FOREST SERVICE
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Foreword

It is a privilege to introduce this remarkable book “**Wildlife Doppelgangers: A Closer Look at Nature's Twins**”, which offers a fresh perspective on the wonders of the natural world. This book strives to nurture curiosity and inspire officer trainees to look more deeply at the world around them and to examine the fine details that make each species unique.

I commend the author for their dedication to creating a resource that is not only informative but also accessible to readers of all ages. This book will undoubtedly foster a deeper appreciation for wildlife, instilling a respect for the intricacies and subtleties that make the natural world so extraordinary.

As you begin this journey through the fascinating world of look-alike species, may it spark your curiosity, enrich your understanding, and deepen your appreciation for the diverse life forms that share our planet.

Best Wishes.



Shri V. Thirunavukarasu, IFS

APCCF & Principal
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Preface

In the vast world of wildlife and forests, certain creatures seem to mirror each other so closely that, at first glance, we may see them as nearly identical. Yet, as with all things in the natural world, appearances can be deceiving.

Within this book, we shall embark on a journey through the fascinating realm of look-alike species, where subtle differences some hidden in their habits, others in their habitats reveal a world far more complex than it seems. From the majestic eagle and the diligent vulture to the delicate butterfly and its nocturnal counterpart, the moth, each pairing tells a story of adaptation, evolution, and survival.

I have tried my best to include the main doppelgangers but still there is a large scope to add more wildlife doppelgangers to this book. Our exhaustive tour programs provide us opportunity to record this type of information. With the inspirations of this book, I hope in future some officer trainee shall write the part II of it.

Welcome to the journey to take a little closer look, observe a little longer, and uncover the subtle marvels of the natural world.

Anusha M

Officer Trainee 2022-24 SFS Batch II

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Contents

Sl. No.	Title	Page No
1	Nature's Differences: A Deep Dive into Wild Animal Traits	1
2	Asiatic elephant and African elephant	2-3
3	Gaur and Bison	4-5
4	Gaur and Buffalo	6-7
5	Antelope and Deer	8-9
6	Crocodiles and Alligators	10-11
7	Dolphins and Whales	12-13
8	Turtles and Tortoises	14-15
9	Rabbits and Hares	16-17
10	Lizards and Geckos	18-19
11	Frogs and Toads	20-21
12	Eagles and Vultures	22-23
13	Crows and Ravens	24-25
14	Parrots and Parakeets	26-27
15	Doves and Pigeons	28-19
16	Moths and Butterflies	30-31

1. Nature's Differences: A Deep Dive into Wild Animal Traits

In the vast world of the wildlife, few things are as captivating and occasionally confusing as the striking similarities between certain species. The natural world is a realm where evolution has sculpted creatures with remarkable traits, often leading to delightful overlaps that can baffle even the most seasoned wildlife enthusiasts. Take, for instance, the hare and the rabbit. At first glance, these two creatures might appear nearly identical: both are agile, both have long ears, and both dart through meadows with the same playful energy. Yet, upon closer inspection, they reveal a fascinating web of differences that speaks to their unique adaptations and lifestyles.

This phenomenon extends far beyond hares and rabbits. Many wild animals share similar physical attributes, behaviours, and habitats, leading to misconceptions and misidentifications. Such similarities can prompt us to group these creatures together, overlooking the intricate details that set them apart.

In the upcoming chapters, we will embark on a journey through the wild, exploring the rich tapestry of similarities and differences that define major animal species. Each chapter delves into the intriguing distinctions between look-alike species, exploring their physical characteristics, behaviours, habitats, and roles in ecosystems. From the nocturnal moth and the colourful butterfly to the regal eagle and the resourceful vulture, each chapter highlights pairs or groups of animals that share outward similarities yet live surprisingly different lives. By uncovering the subtle and often surprising features that distinguish one species from another, this book aims to deepen our appreciation for the diversity of life on Earth. Whether you're a nature enthusiast or not, if you are simply curious about the natural world, this guide provides accessible insights and vivid illustrations that reveal the hidden stories of creatures we often overlook. Dive in, and discover the fine lines that make each species wonderfully unique.

2. Asiatic Elephant and African Elephant



African (Right) and Asian (Left) elephants

The differences between African and Asian elephants extend far beyond how they look, encompassing their habitats, social structures, reproductive biology, conservation status, and cultural significance. Someone unfamiliar with elephants, it might seem like African and Asian elephants look the same at first glance.

However, there are quite a few interesting differences in their appearance worth noting.

Feature	Asian Elephant	African Elephant
Species	One species: Asian elephant (<i>Elephas maximus</i>)	Two species: African bush elephant (<i>Loxodonta africana</i>) and African forest elephant (<i>Loxodonta cyclotis</i>)
Ears	Smaller, rounded ears, about 2-3 feet (0.6-0.9 meters) long.	Large, fan-shaped ears that help dissipate heat; can be over 4 feet (1.2 meters) long
Tusks	Only some males have tusks, and they are usually smaller; females typically do not have tusks.	Both males and females often have tusks; tusks can grow several feet long.
Trunk	Shorter trunk, still highly flexible but less versatile than that of the African elephant.	Long, versatile trunk with more than 40,000 muscles; used for feeding, drinking, and social interactions.
Body Shape	Slender body, with a more pronounced curve on the back.	Generally larger and more robust, with a barrel-shaped body.
Habitat	Found in forests, grasslands, and hilly areas in Southeast Asia and the Indian subcontinent.	Prefer savannas, forests, and grasslands across sub-Saharan Africa.
Head Shape	More rounded with a prominent dome and a smaller forehead.	Broad, rounded head with a single dome shape.
Conservation Status	Endangered, facing threats from habitat loss, human-elephant conflict, and poaching.	Vulnerable due to poaching for ivory and habitat loss; populations are declining.

3. Gaur and Bison



Gaur (Below) and Bison (Above)

Denizens of our emerald forests, Gaur is one of the largest living bovines (can live up to 20 years in the wild), ruling certain grounds of the Indian sub-continent. A native to south and Southeast Asia, this bulky bovine is often misinterpreted as Bison which is technically wrong, so let's look at the difference

Feature	Gaur (<i>Bos gaurus</i>)	Bison (<i>Bison bison</i> for American bison; <i>Bison bonasus</i> for European bison)
Skin Colour	Dark brown to black with white markings on the legs and face; sometimes has a reddish tint.	Dark brown to black with a shaggy coat; American bison have a thick winter coat, while European bison are slightly lighter.
Horns	Long, curved horns that can reach up to 3.3 feet (1 meter) in length; horns are thick and spiral outward.	Shorter, curved horns, generally about 1-2 feet (0.3-0.6 meters); can vary in size but are less prominent than those of gaurs.
Behaviour	Social animals, typically forming small herds led by a dominant female; can be aggressive when threatened.	Social animals often found in larger herds; exhibit strong maternal care; can be aggressive, particularly during mating season.
Body Structure	Robust body with a prominent hump on the shoulders; muscular build.	Stocky body with a large head and a hump; American bison have a more pronounced shoulder hump.
Habitat Adaptations	Well adapted to forested environments; strong climbers and can navigate steep terrains.	Adapted to grazing in open plains; thick fur for insulation; large body size helps conserve heat.
Conservation Status	Classified as Vulnerable by the IUCN due to habitat loss and poaching.	American bison: near threatened; European bison: classified as Vulnerable due to habitat loss and hunting.

4. Gaur and Buffalo



Gaur (Above) and Buffalo (Below)

Guar and Water Buffalo are often confused in the wild. Let's see how to differentiate them...

Feature	Gaur (<i>Bos gaurus</i>)	Buffalo (<i>Bubalus</i> spp., including Water Buffalo and African Buffalo)
Skin Colour	Dark brown to black with white markings on the legs and sometimes the face.	Domestic water buffalo: black or dark grey, sometimes lighter; African buffalo: typically, dark brown or black.
Horns	Long, curved horns up to 3.3 feet (1 meter) in length, thick and spiral outward from the head.	Water buffalo have long, backward-curving horns, up to 5 feet; African buffalo have shorter, crescent-shaped horns joined at the base, forming a "boss" in males.
Behaviour	Social animals forming small herds, usually led by a dominant female; generally peaceful but can be aggressive when threatened.	Water buffalo: social and adaptable, often domesticated; African buffalo: highly social, forming large herds and known for unpredictable aggression when threatened
Body Structure	Muscular, large body with a prominent shoulder hump; compact legs and broad, deep chest.	Stocky build with shorter legs; African buffalo have robust bodies and are more compact.
Habitat Adaptations	Well adapted to hilly, forested terrains; strong climbers with keen senses for forested habitats.	Water buffalo: adapted to wetlands with wide hooves for marshy ground; African buffalo: adapted to dry grasslands, robust and highly resilient.
Conservation Status	Classified as Vulnerable by the IUCN due to habitat loss and poaching.	American bison: near threatened; European bison: classified as Vulnerable due to habitat loss and hunting.

5. Antelope and Deer



Antelope (Right) and Deer (Left)

Deer and antelope are both hoofed, ruminant mammals with different physical appearances, taxonomies, and habitats. Antelopes are not a type of deer. All antelope species are members of the Bovidae family, meaning they are related to animals like cattle and goats. Deer, on the other hand, are members of the Cervidae family

Feature	Antelope	Deer
Horn/Antler Structure	Permanent, unbranched horns; made of keratin; do not shed	Branched antlers; made of bone; shed and regrow annually
Body Build	Typically, slender with long legs for fast running	Generally, more robust with varying leg lengths
Running Style	Known for their speed and endurance; some can reach up to 60 mph	Usually slower; rely more on agility and jumping ability
Tail	Short and often inconspicuous	Often longer and more visible
Social Structure	Typically, live-in large herds	Live in smaller groups; males often solitary outside of mating season
Grazing/ Browsing	Primarily grazers (feed on grasses)	Both grazers and browsers; feed on grasses, shrubs, and tree leaves
Species Diversity	There are 6 species of antelopes found in India. These are Tibetan Antelope (<i>Pantholops hodgsoni</i>), Tibetan Gazelle (<i>Procapra picticaudata</i>), Blackbuck (<i>Antelope cervicapra</i>), Nilgai (<i>Boselaphus tragocamelus</i>), Four-horned Antelope (<i>Tetracerus quadricornis</i>), and Chinkara (<i>Gazella bennettii</i>).	There are 9 species (in India), spotted deer (<i>Axis axis</i>), indian chevrotain (<i>Moschiola indica</i>), himalayan musk deer (<i>Moschus Leucogaster</i>), indian or red muntjac (<i>Muntiacus muntjak</i>), sambar deer (<i>Rusa unicolor</i>), kashmir red deer (<i>Cervus Elaphus</i>), brow-antlered deer (<i>Cervus eldii</i>), swamp deer or barasinga (<i>Cervus duvaucelli</i>), hog deer (<i>Axis porcinus</i>)

6. Crocodiles and Alligators



An alligator in Florida (left) and a saltwater crocodile (right)

Crocodiles and alligators might look similar at a glance, but the two ancient reptiles are quite different. For starters, they're part of different families within the Crocodylia order. They also have different body sizes, snout shapes and habitats. India has alligators but are not native to India.

Feature	Crocodile	Alligator
Taxonomic Family	Crocodylidae	Alligatoridae
Snout Shape	Long, V-shaped (pointed) snout	Broad, U-shaped (rounded) snout
Teeth Visibility	Both upper and lower teeth visible when mouth is closed	Only upper teeth visible when mouth is closed
Habitat	Primarily saltwater and freshwater (coastal areas, rivers, lagoons)	Mainly freshwater (rivers, lakes, swamps)
Geographic Distribution	Found in Africa, Asia, Australia, and the Americas	Primarily found in the United States and China
Hunting Behavior	More active hunters, especially at night	More opportunistic and scavenging
Aggression	Generally, more aggressive and likely to attack humans	Less aggressive, though will attack if threatened
Lifespan	Can live up to 70–100 years	Can live up to 35–50 years
Salt Glands	Well-developed salt glands, allowing them to live in saltwater environments	Poorly developed salt glands; prefer freshwater environments
Sensory Pits	Sensory pits on nearly every scale covering the body	Sensory pits mainly around the jaw area
Species Diversity	Approximately 15 species (e.g., Nile, saltwater crocodile)	Only two species (American and Chinese alligator)

7. Dolphins and Whales



Dolphin (Left) and Whale (Right)

Dolphins and whales are integral members of the marine ecosystem. First thing's first: all dolphins are whales, but not all whales are dolphins. That's because the Cetacean order of sea animals encompasses dolphins, porpoises and what we think of as whales. And Cetacean is derived from the Greek word for whale, ketos. There are so many fascinating similarities between these marine mammals that we often forget their differences. Let's find them out now.

Feature	Dolphin	Whale
Size	Generally smaller, ranging from 4 to 30 feet	Larger, ranging from 10 to 100 feet
Body Shape	Streamlined, slender bodies with a pronounced dorsal fin	More robust, often rounded or elongated bodies; dorsal fin varies
Snout	Usually have a long, beak-like snout	Typically lack a distinct snout; broader heads
Social Structure	Highly social; often live-in pods of 10–30 or more	Some species are solitary, while others live in small groups
Diet	Primarily fish, squid, and other small marine animals	Diet varies by species: baleen whales eat plankton, krill, small fish; toothed whales eat fish, squid, and marine mammals
Swimming Style	Fast swimmers; can reach speeds up to 60 km/h (37 mph)	Generally slower, though some species (e.g., orcas) can be agile
Geographic Distribution	Found in oceans worldwide, and some species in rivers	Found in all major oceans; some species migrate long distances
Echolocation	Highly developed echolocation for hunting and navigation	Toothed whales use echolocation; baleen whales do not use it as extensively

8. Turtles and Tortoises



Turtle (Below) and Tortoise (Above)

All tortoises are in fact turtles—that is, they belong to the order Testudines or Chelonia, reptiles having bodies encased in a bony shell but not all turtles are tortoises. What is a tortoise anyway? Is it just a fancy way to say “turtle”? Well, actually, there's a meaningful difference between tortoises and other turtles. Let's dive into that difference.

Feature	Turtle	Tortoise
Scientific Classification	Belong to the order Testudines, with various families	Belong to the order Testudines, primarily family Testudinidae
Swimming Ability	Strong swimmers, especially sea turtles, which are adapted for ocean life	Do not swim; cannot survive in water for extended periods
Habitat	Primarily live-in water environments (oceans, rivers, ponds)	Terrestrial; live on land in various habitats, including deserts and forests
Shell Shape & Shell Texture	Flatter, streamlined shells for swimming & Smoother, more streamlined shells	Dome-shaped, heavier shells for protection on land & Rough, bumpy shells with thick protective layers
Feet Structure	Webbed feet or flipper-like limbs for swimming	Short, sturdy, elephant-like feet adapted for walking
Diet	Omnivorous; diet includes fish, insects, plants, and algae	Primarily herbivorous; eat grasses, leaves, flowers, and fruits
Life Span	20–40 years on average; some species live longer	80–150 years; some species can live over 150 years
Size	Varies greatly by species, generally smaller than tortoises	Typically larger, though size varies across species
Adaptations	Adapted for aquatic life; streamlined bodies and limbs	Adapted for terrestrial life; sturdy legs and high-domed shells

9. Rabbits and Hares



Rabbit (Right) and Hare (Left)

Given the strong similarities between rabbits and hares, it's easy to hop to the conclusion that they're the same animal but it is not so. They're both in the same family, Leporidae, which consists of 11 genera divided into 73 species but has difference social habit and many more. Let's dive into that difference.

Feature	Rabbit	Hare
Size	Generally smaller and more compact	Larger, with longer limbs and larger ears
Ears	Shorter ears compared to hares	Longer ears with black tips, adapted for hearing in open habitats
Body Structure	Rounder, stockier bodies	Slimmer, more muscular bodies
Birth	Born altricial (blind, hairless, and helpless)	Born precocial (fully furred, with open eyes, and mobile)
Behavior	More social; often live-in colonies or groups	Solitary; usually more independent and less social
Legs	Shorter hind legs, adapted for quick, short sprints	Longer, stronger hind legs, built for running and leaping
Escape Tactics	Run in a zigzag pattern to evade predators	Rely on speed in a straight line to escape threats
Lifespan	8–12 years in the wild	4–7 years in the wild
Nesting	Give birth in burrows or warrens for protection	Give birth in shallow nests called "forms" on the ground

10. Lizards and Geckos



Lizard (Below) and Gecko (Above)

Geckos and lizards are both members of the Squamata order, but they have distinct differences. Geckos are known for their unique vocalizations and the ability to climb smooth surfaces which differ from lizards. Let's dive into that difference.

Feature	Lizard	Gecko
Scientific Classification	Belongs to the order Squamata, suborder Lacertilia	Belongs to the order Squamata, family Gekkonidae
Skin Texture	Dry, scaly skin; some have smooth or rough scales	Softer, often velvety skin; many species have granular scales
Colour and Pattern	Can be dull or brightly coloured; patterns vary by species	Often brightly coloured and patterned; some can change colour to blend in
Eye Structure	Movable eyelids in most species; eyes adapted for daylight	No eyelids; transparent membrane over eyes; adapted for low light
Toe Structure	Clawed toes, often without specialized adhesive pads	Specialized toe pads with tiny setae for climbing smooth surfaces
Vocalization	Generally silent; some species may hiss or make sounds in distress	Vocal; known for chirping, clicking, and squeaking sounds for communication
Tail	Many can shed tails as a defence mechanism (autotomy); tails can be quite long	Also capable of tail autotomy; tails are generally shorter and thicker
Social Behaviour	Generally solitary; territorial in many species	Some are social; may live in small groups or pairs
Diet	Primarily insectivorous, some are herbivorous or omnivorous	Mostly insectivorous, though some may eat fruit or nectar
Habitat	Found in a wide variety of environments (deserts, forests, grasslands)	Primarily found in warmer climates; often in tropical and subtropical regions
Notable Species Examples	Iguanas, anoles, skinks, monitor lizards	Leopard gecko, tokay gecko, crested gecko

11. Frogs and Toads



American toad (left) and American bullfrog (right)

While frogs and toads are both amphibians, they are separate families of animals. And while they are similar in many ways, they do have differences, although they are not always clear cut. Let's dive into their similarities and differences, starting with this fun but confusing fact: All toads are frogs, but not all frogs are toads.

Basically, toad is a classification of frog and there's no scientific distinction between a toad and a frog.

Feature	Frog	Toad
Skin Texture	Smooth, moist, and often shiny skin	Dry, bumpy, and rough skin
Body Shape	Slim and streamlined	Stouter, with a wider body
Leg Length	Longer legs for jumping and swimming	Shorter legs for hopping or walking
Habitat	Primarily live near water bodies	Can be found farther from water in damp places
Reproduction	Lay eggs in clusters or masses in water	Lay eggs in long, chain-like strings in water
Moisture Requirement	High moisture; require water to keep skin moist	Lower moisture; can tolerate drier conditions
Movement Style	Jump or leap due to powerful hind legs	Short hops or crawling, due to shorter legs
Colour	Usually green, brown, or bright-coloured for camouflage or warning	Often earth-toned (brown, grey)
Skin Glands	Have glands to keep skin moist but fewer toxins	Have more prominent poison glands on their backs
Defence Mechanisms	Often rely on camouflage or speed	Rely on toxins and camouflage to deter predators

12. Eagles and Vultures



Vulture (Above) and Eagle (Below)

Eagle and Vulture are two distinct bird species that are often confused to be the same. While both eagles and vultures are birds of prey and belong to the same taxonomic order, they have distinct characteristics that set them apart. Eagles and vultures both play essential roles in their ecosystems, with eagles being apex predators and vultures being nature's clean-up crew. Let's learn about the differences between eagle vs vulture.

Feature	Eagle	Vulture
Physical Appearance	Strong, muscular body with sharp, curved beak and large talons	Less muscular with bald head and neck, weaker feet
Beak Structure	Sharp, curved, and pointed for tearing flesh	Longer, hooked, and less sharp; adapted for scavenging
Head and Neck	Fully feathered head and neck	Bald head and neck, often for hygiene in scavenging
Vision	Exceptional eyesight, can spot prey from great distances	Good vision but generally not as keen as eagles
Hunting Style & Diet	Active hunter, dives at high speeds to capture prey, primarily carnivorous, hunts live prey	Rarely hunts, mostly locates carrion by soaring high, primarily scavenger, feeds mostly on carrion
Wing Shape	Broad, powerful wings for fast flying and manoeuvring	Broad wings for soaring and gliding over long distances
Flight Behaviour	Strong, direct flier, often glides at high speeds	Excellent at soaring, uses thermals to stay aloft
Social Behaviour	Generally solitary, may pair with a mate for life	Often social, feeds in groups at carrion sites
Primary Role in Ecosystem	Predator, helps control populations of prey species	Scavenger, plays a vital role in ecosystem clean-up

13. Crows and Ravens



Raven (left) and Crow (right)

The black-feathered, big-brained birds exist on nearly every continent, and stories follow them everywhere they go. Their intelligence is highly documented, with studies being done on face recognition and tool usage. While crows and ravens are different species of birds, they do tend to be referred to interchangeably in culture due to their similar characteristics.

Feature	Crow	Raven
Size	Smaller, around 16–20 inches (40–50 cm) in length	Larger, around 22–30 inches (56–76 cm) in length
Build	Slimmer, more lightweight	Heavier and bulkier with a more robust build
Beak	Smaller, thinner, and straighter beak	Larger, thicker, and more curved beak
Feather Texture	Sleeker, less textured feathers	Shaggier throat feathers, giving a “ruffled” appearance
Tail Shape	Fan-shaped tail when in flight	Wedge-shaped or diamond-like tail when in flight
Vocalization	Distinctive “caw” sound, higher-pitched	Lower-pitched, deep “croak” or “gronk”
Social Behaviour	Highly social, often seen in large groups	Generally, more solitary or in pairs, but may gather in small groups
Habitat	Adaptable, found in urban areas, fields and forests	Prefers wilder, more remote habitats like forests and mountains
Symbolism and Mythology	Often seen as messengers or symbols of intelligence in various cultures	Associated with mystery, wisdom, and sometimes omens in folklore
Species Examples	American Crow, Carrion Crow	Common Raven, Northern Raven

14. Parrots and Parakeets



Parrot (Right) and Parakeet (Left)

Why do some people call a bird a parrot, while others call them a parakeet? While all parakeets are parrots, not all parrots are parakeets. Parakeets are simply a subgroup within the broader parrot family, distinguished by their smaller size, long tails, and generally more manageable requirements as pets. If you have ever wondered about the difference between a parrot and a parakeet, the answers may not be so farfetched. Let us try to know some of the differences.

Feature	Parrot	Parakeet
Size	Typically larger, ranging from 10–40 inches (25–100 cm), depending on species	Smaller, usually 7–12 inches (18–30 cm), depending on species
Body Structure	Stockier and more robust	Slimmer and more streamlined
Tail Shape	Shorter, rounded or square-shaped tails	Long, tapering tail feathers
Beak	Curved and large; adapted for cracking hard nuts and seeds	Smaller curved beak but strong enough for seeds
Coloration	Wide variety of bright colours, often multi-coloured	Often green, though other colours are common in pet varieties
Lifespan	Longer lifespan, generally 20–80 years depending on species	Shorter lifespan, generally 5–15 years in captivity
Speech and Mimicry	Excellent mimics; larger parrots like African Grey and Amazon are known for complex mimicry	Some parakeets, like Budgerigars, can mimic words but generally have a limited vocabulary
Native Habitat	Found in tropical and subtropical regions worldwide, especially South America and Africa	Native to various regions, including Australia, Asia, and South America
Popular Species	Macaws, African Grey Parrots, Amazons, Cockatoos	Budgerigars (Budgies), Indian Ring necked, Monk Parakeet

15. Doves and Pigeons



Pigeon (Left) and Mourning Dove (Right)

Though the terms “dove” and “pigeon” are often used interchangeably, "dove" usually refers to smaller, lighter-coloured members of the Columbidae family, while "pigeon" refers to larger and often darker-coloured species, especially in urban environments. Let us try to know some of the differences.

Feature	Dove	Pigeon
Size	Generally smaller, around 6–12 inches (15–30 cm)	Generally larger, around 11–15 inches (28–38 cm)
Tail Shape	Tails are often longer and more pointed	Tails are shorter and more squared
Coloration	Typically, lighter in colour, often white, grey, or soft pastels	Wide range, including grey, blue-grey, brown, with iridescent necks
Bill and Feet	Small, delicate beaks and feet	Larger, thicker beaks and feet
Vocalization	Softer, cooing calls that are less varied	Louder cooing sounds, often with more variety
Adaptability to Humans	Less commonly found in urban areas, often in rural or wild regions	Highly adaptable; often seen in cities and parks
Flight Pattern	Swift, direct flight; often more agile	Strong, powerful flyers with less agility but greater endurance
Breeding and Nesting	Build simpler nests, usually in secluded areas	Build nests in urban areas and adapt to various environments
Popular Species Examples	Mourning Dove, Eurasian Collared-Dove, White Dove	Rock Pigeon (common city pigeon), Feral Pigeon

16. Moths and Butterflies



Left: Zodiac Moth. Right: Monarch Butterfly

Spotted a flying beauty and not sure whether it's a butterfly or a moth? Although both of these fluttering insects come under the classification Lepidoptera, they possess many differences that classify them as a butterfly or a moth. They have evolved distinct features and behaviours to adapt to their primarily nocturnal and diurnal lifestyles, respectively. Let us try to know some of the differences.

Feature	Moth	Butterfly
Activity	Mostly nocturnal (active at night)	Mostly diurnal (active during the day)
Antennae Shape	Feathery or comb-like, often without a clubbed tip	Thin with a clubbed or bulbous tip
Wing Position at Rest	Wings are usually spread flat against the surface or tented over the body	Wings are typically held upright over the back
Coloration	Often dull or earth-toned colours for camouflage	Typically bright, vibrant colours to attract mates or warn predators
Wing Shape	Generally broader, with less variation in shape	Diverse and often more delicate with a variety of shapes
Pupal Case	Enclosed in a silk cocoon, often soft	Enclosed in a chrysalis, usually hard and exposed
Scale Structure on Wings	More dust-like scales that come off easily	More colourful scales that stay intact longer
Body Structure	Generally thicker, fuzzier bodies to retain warmth at night	Slender, smoother bodies
Examples of Species	Luna Moth, Hawk Moth, Atlas Moth	Monarch Butterfly, Swallowtail, Painted Lady

