

Raptors of Gujarat



- Nirav Bhatt

Introduction

- **Raptor** : The term "raptor" is derived from the Latin word "*rapere*" (meaning to seize or take by force) and may refer informally to all birds of prey.
- **Bird of Prey** : In ornithology, the term has a narrower meaning for birds that have very good eyesight for finding food, strong feet for holding food, and a strong curved beak for tearing flesh. Most birds of prey also have strong curved talons for catching or killing prey.
- Birds of prey generally prey on vertebrates, which are usually quite large relative to the size of the bird. Most also eat carrion at least occasionally and the vultures and condors eat carrion as their main food source.
- By way of an example, the narrower definition excludes storks and gulls, which can eat quite large fish, partly because these birds catch and kill prey entirely with their beaks, and similarly bird-eating skuas, fish-eating penguins, and vertebrate-eating kookaburras are excluded.

Raptors of Gujarat

- I have tried to classify the raptors of Gujarat largely by their family or genus for ease of understanding

1. **Kites** (Black winged, Brahminy, Black & Black-Eared Kite)

2. **Buzzards** (Oriental Honey, White Eyed, Common, Long Legged Buzzard)

3. **Accipiter** (Shikra & Sparrow-hawk)

4. **Harriers** (Marsh, Montagu's & Pallid Harrier)

5. **Eagles (Aquila)** (Steppe, Indian spotted, Greater spotted, Tawny, Imperial & Bonelli's Eagle)

6. **Eagles (Non-Aquila)** (Booted, Short Toed, Changeable Hawk & Crested Serpent)

7. **Vultures** (White Backed, Egyptian, Indian, Red Headed, Eurasian Griffon & Cinereous)

8. **Large Falcons** (Peregrine, Laggar, Saker & Barbary Falcon)

9. **Small Falcons** (C.Kestrel, L.Kestrel, Merlin, E.Hobby, Amur & Red Necked Falcon)

10. **Others** (Osprey & White Bellied Sea Eagle)

* I have intentionally skipped a few species which have rare isolated records in Gujarat

1. Kites

There are 4 species of Kites found in Gujarat

1. **Black Winged Kite** (*Elanus caeruleus*)

- It is common resident throughout Gujarat and is one of the most common raptor of Gujarat. The cotton like white body gives its Gujarati Name “Kapasi” – Derived from Kapas (Cotton)

2. **Brahminy Kite** (*Haliastur indus*)

- It is common resident through the coastal Gujarat. The adults are easily identifiable while the juveniles may be confusing at times.

3. **Black Kite** (*Milvus migrans*)

- It is another common resident raptor found throughout Gujarat and it is specially found inside the cities amongst human population

4. **Black-Eared Kite** (*Milvus migrans lineatus*)

- The Black Eared Kite has been recently split Black kite and is now considered as a separate species. It is a winter migrant and can occur throughout Gujarat but detailed distribution of the same in Gujarat is not been studied in details.

Kites

Black Winged Kite



Black Winged Kite (Hovering)



* Black Winged Kite is typically found hovering at one place in search of food !!

Kites

Brahminy Kite (Adult)



Brahminy Kite (Juvenile)



Note : White Head & Neck, Pale beak & Rufous wings are typical features of Adults.
Juveniles are identified by Grey Beak & Cere, Roundish head & Round Tail (In Flight).
Also note the weak unfeathered tarsi which are ideal to catch hold small preys (Typically fishes)

Kites

Black Kite



Black-Eared Kite



Note : Bulkier Body, Pale throat & black ears coverts.

Kites

Black Kite



Black-Eared Kite



* Note the dark Ear coverts, bulkier body and broader wings of the Black Eared Kite !

Kites

Black-Eared Kite (Size Difference)



2. Buzzards

There are 4 species of Kites found in Gujarat

1. **Oriental Honey Buzzard** (*Pernis ptilorhynchus*)

- It is common resident throughout Gujarat and it is one of the most variable raptor as it comes in variety of colors and patterns which makes this bird as a difficult to identify bird. This is not a true buzzard.

2. **White Eyed Buzzard** (*Butastur teesa*)

- It is common resident of Gujarat. Although the name suggests White Eyed, but the juveniles have a dark or black eye which makes them difficult to identify. This is also not a true buzzard

3. **Common Buzzard** (*Buteo buteo (vulpinus)*)

- It is a relatively uncommon migrant raptor. It usually prefers dry habitats and there are multiple isolated records of this bird throughout Saurashtra & Kutch in the winters.

4. **Long Legged Buzzard** (*Buteo rufinus*)

- It is an uncommon migratory raptor that prefers arid habitats. At times confusing with Common buzzard but larger size, stout body, & upright stance helps differentiate the two. Found extensively in Kutch!

Buzzards

Oriental Honey Buzzard
(Adult Male)



Oriental Honey Buzzard
(Adult Female)



Oriental Honey Buzzard
(Juvenile)



- Note the Pigeon like head, relatively weaker beak & legs. Crest may be present in a few individuals
- Also note the colour of eyes in all the three individuals in relation to their age & sex

Buzzardss

Oriental Honey Buzzard (In-Flight)



* Note the typical 6 fingers, weak legs and pigeon like head

Buzzards

White Eyed Buzzard (Adult)



White Eyed Buzzard (Juv)



- Note the difference in colour of eyes !!

Buzzards

Common Buzzard 1



Long Legged Buzzard 1



Note : LLB has bulkier body, larger head & Longer Legs in comparison to Common.

Buzzards

Common Buzzard (Juv)

Long Legged Buzzard 2



* Note the brown eyes of Common Buzzard indicating it's a Juvenile

3. Accipiters

There are 2 species of Accipiters found in Gujarat

1. **Shikra** (*Accipiter badius*)

- It is common resident throughout Gujarat and it is easily found even in densely populated cities. The adults have grey upperparts and finely barred underparts while juveniles are brown with streaked underparts. Adult males have red eyes and females and juveniles have yellow eyes.

2. **Eurasian Sparrow-hawk** (*Accipiter nisus*)

- It is a migratory accipiter which looks similar to Shikra. The males have dark grey upperparts and dark chestnut underparts while the females varies from Dark Grey to Brown colour. Juveniles have “V” shaped markings on the underparts.

Note : There have been isolated records of Northern Goshawk and Besra in Gujarat but there are NO (or very less) authentic photographic evidence of the same available. If at all they are considered to be very rare.

Accipiters

Shikra
(Adult Male)



Eurasian Sparrowhawk
(Adult Male)



Note Larger Size, Dark Eye Stripes & Ear-coverts & absence of Gular Stripe in Sparrowhawk in all plumages. Note the Eye Colour difference in Adult Males of the two species

Accipiters

Shikra
(Sub-Adult Female)



Shikra
(Adult Female)



Eu. Sparrow-hawk
(Adult Male)



Note the difference in Barrings in the 3 individuals. Note darker head & eye stripe of Sparrowhawk.

Accipiters

Shikra
(Juvenile 1)



Shikra
(Juvenile 2)



Eu. Sparrow-hawk
(Juvenile)



Note : Shikra may have light to heavy streakings & spots & faint to dark eyebrow & gular stripe. Sparrowhawk Juvenile usually shows prominent supercilium, fine 'V' shaped barring, white spots on wings & absence of Gular Stripe.

Accipiters

Eurasian Sparrow-hawk

Sub-Adult Female



Sub-Adult Female



Adult Female



* Note : Prominent Supercilium, No of Gular stripe, thin legs & barred under parts.

4. Harriers

There are 3 species of Harriers found in Gujarat. All of them are migratory.

1. Eurasian Marsh Harrier (*Circus aeruginosus*)

- It is seen throughout Gujarat and as the name suggests, it usually prefers marshy habitat. It is the largest of the three harriers commonly found in Gujarat. Adult males have pale head, rufous upperparts and underparts & grey wings. Females & juveniles are uniform dark brown with pale crown and throat.

2. Pallid Harrier (*Circus pygargus*)

- It is relatively uncommon harrier and migrates to Gujarat in lesser number as compared to the other two. Adult males are light grey coloured while females & Juveniles are brownish. They usually prefer grassland habitat.

3. Montagu's Harrier (*Circus macrourus*)

- It is the commonest of the harriers found in Gujarat and they comprise of approximately more than 70% of total harriers migrating of Gujarat. The Adult male has darker grey upperparts and females & juveniles are similar to Pallid.
- Note : There have been isolated records of Pied Harrier and Hen Harrier in Gujarat but there are NO (or very less) authentic photographic evidence of the same available. If at all they are considered to be very rare.

Harriers

Eurasian Marsh Harrier
(Male)

Eurasian Marsh Harrier
(Female)



© Nirav



Harriers

Eurasian Marsh Harrier (Dark)



Eurasian Marsh Harrier (Dark)



Harriers

Eurasian Marsh Harrier (Adult Male In Flight)



Harriers

Montagu's Harrier (Male) 1



Pallid Harrier (Male) 1



Pallid Harrier male is much paler with a heavier built than the Montagu's Harrier

Harriers

Montagu's Harrier (Male) 2



Pallid Harrier (Male) 2



* Montagu's upper-wings has black band across secondaries & streaked under-wing coverts

Harriers

Montagu's Harrier (Female)



Pallid Harrier (Female)



* Pronounced pale collar and heavier built helps differentiate the pallid from the Montagu's

Harriers

Montagu's Harrier (Juv)



Pallid Harrier (Juv Male)



* Juvenile Males have yellow eyes !!

* Pronounced pale collar and heavier built helps differentiate the pallid from the Montagu's

5. Eagles (Aquilas)

There are 6 species of Aquila Eagles found in Gujarat

1. Steppe Eagle (*Aquila nipalensis*)

- It is a massive Eagle which is one of the commonest migratory Aquilas of Gujarat. Colour is variable from Pale Brown to dark Black. The gape extending up to back of the eye, baggie trousers and bulky body are key features of ID.

2. Tawny Eagle (*Aquila rapax*)

- It is an uncommon resident Eagle of Gujarat with not much information available on it's status. Like Steppe, it is also variable in colour, Gape reaching up to centre of the eye & powerful featured tarsi & bulky body.

3. Greater Spotted Eagle (*Aquila clanga*)

- It is another migratory eagle which is wide spread in Gujarat. It usually prefers wetland habitats. Adults are uniform brown while juveniles are spotted variably. Weaker beak, smaller size and gape extending up to centre of eye are ID pointers

4. Indian Spotted Eagle (*Aquila hastata*)

- It is a rare Aquila for Gujarat. There have been very less studies and reports of status of this bird in Gujarat. Similar to GSE but Round head, longer gape, smaller size and less feathered tarsi are important features.

5. Eagles (Aquilas)

5. Eastern Imperial Eagle (*Aquila heliaca*)

- It is another large migratory eagle of Gujarat, the 2nd largest eagle of India. It prefers arid or large open areas. Adults have black body with golden nape and white shoulder patches. Juveniles have streaked underparts. Separated from other Aquilas by grey eyes, longer beak & thin gape extending up to centre of the eye.

6. Bonelli's Eagle (*Aquila fasciata*)

- It is uncommon resident of Gujarat with very less information available on the status. Looks different than all the other Aquilas due to longer & powerful feathered legs, longer neck & roundish head with gape extending up to centre of the eye. Adults are brownish above with finely streaked pale under parts. Juveniles are uniform brown in colour.

Eagles (Aquilas)

Steppe Eagle 1



Tawny Eagle 1



* Note the gape extending beyond eye & heavier built with baggie trousers of Steppe

Eagles (Aquilas)

Both Steppe Eagle (Size Diff)



Tawny & Steppe (Size Diff)



- There is significant size difference in these Aquilas as evident in the above picture.

Eagles (Aquilas)

Steppe Eagle (Flight)

Tawny Eagle (Flight)



- Aquilas are usually difficult to ID in flight except for the typical individuals

Eagles (Aquilas)



Pic : Niranjan Sant

Tawny Eagle



Steppe Eagle

Eagles (Aquilas)

Convocation of Steppe Eagles

© Nirav Bhatt



Eagles (Aquilas)

Greater Spotted Eagle (Adult)



Greater Spotted Eagle (Juv.)



Eagles (Aquilas)

Greater Spotted Eagle



Indian spotted Eagle



Eagles (Aquilas)

Greater Spotted Eagle



Indian spotted Eagle



- Note weaker build, thinner legs & weaker head of ISE in comparison to GSE.

Eagles (Aquilas)

Greater Spotted Eagle (Fulvecens Morph)



- This is a fulvecens morph of Greater Spotted Eagle which is rare winter migrant to India

Eagles (Aquilas)

Eastern Imperial Eagle (Adult)



Eastern Imperial Eagle (Juv.)



Eagles (Aquilas)

Eastern Imperial Eagle (Adult)



Eastern Imperial Eagle (Juv.)



Eagles (Aquilas)

Eastern Imperial Eagle Juvenile (Light & Dark individuals)



- Juveniles of Imperial eagles are often found in dark and light colour variations

Eagles (Aquilas)

Bonelli's Eagle (Adult)



Pic : Niranjan Sant

Bonelli's Eagle (Juvenile)



Pic : Niranjan Sant

Note the Bulky bird Powerful Legs, Roundish head with gape not extending upto the centre of the eye. Adults have paler underparts while juveniles have darker underparts.

Eagles (Aquilas)

Bonelli's Eagle (Adult)



Pic : Niranjan Sant

Bonelli's Eagle (Juvenile)



Pic : Niranjan Sant

Note broader longer wings, longer tail & powerful feathered tarsi in comparison to Aquilas

6. Eagles (Non-Aquilas)

There are 4 species of Non-Aquila Eagles found in Gujarat

1. **Booted Eagle** (*Hieraetus pennatus*)

- It is a fairly common but very illusive migratory raptor usually found throughout the state. Usually seen soaring on wetlands and fields. In flight it is identified by prominent white patches on shoulder known as “Head-Lights”.

2. **Short Toed Snake Eagle** (*Circaetus gallicus*)

- It is relatively common resident eagle of Gujarat. Usually found perched on road side Electric towers, it can be easily identified by Owl like head, Pale body, & un-feathered legs.

3. **Changeable Hawk Eagle** (*Nisaetus cirrhatus*)

- It is resident of the woodlands of Gujarat. Adults are easily identified by their long crest feathers & sleek powerful body and long feathered legs. Juveniles have paler underparts & crest is absent.

4. **Crested Serpent Eagle** (*Spilornis cheela*)

- It is another resident of woodlands of Gujarat. Brown coloured body, yellow cere, yellow un-feathered legs & spotted shoulders are key features of the CSE.

Eagles (Non-Aquilas)

Booted Eagle 1

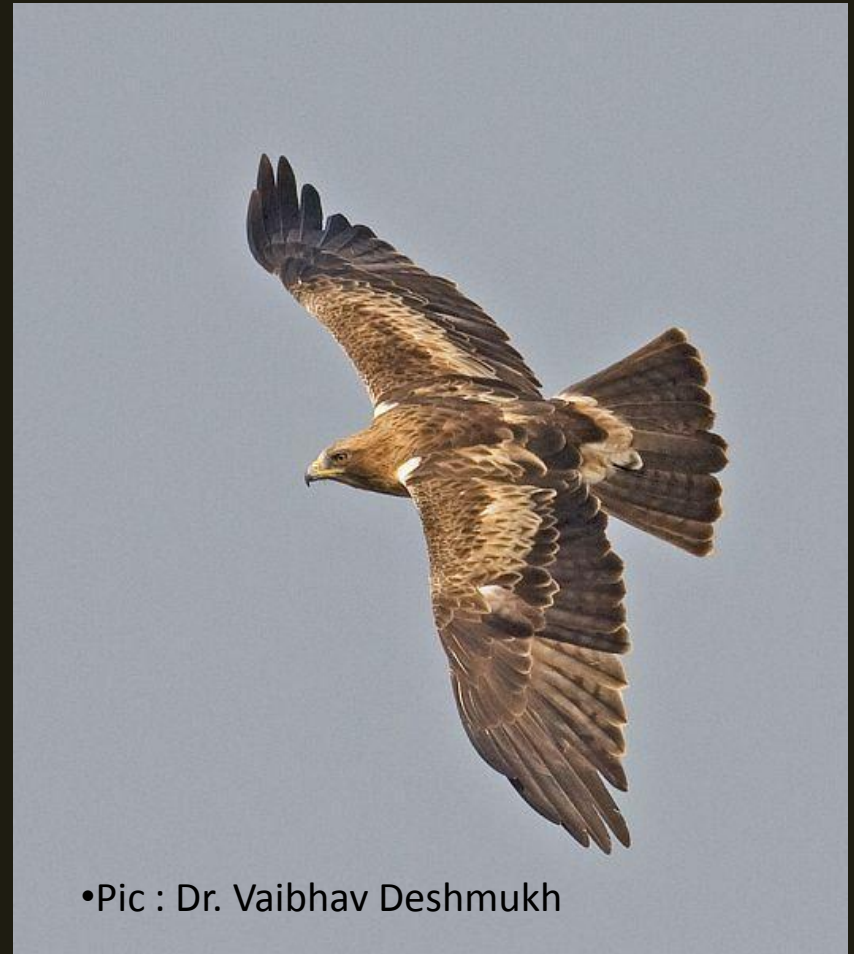


Booted Eagle 2



Eagles (Non-Aquilas)

Booted Eagle 2



•Pic : Dr. Vaibhav Deshmukh

•Note the “Headlights” on the shoulders of the bird on right seen in flight from above.

Eagles (Non-Aquilas)

Short Toed Snake Eagle 1



- Note “Owl” like round head, Yellow eyes and un-feathered tarsi

Eagles (Non-Aquilas)

Short Toed Snake Eagle 2



Eagles (Non-Aquilas)

Changeable Hawk Eagle 1



Powerful feathered legs, Dark beak, streaked throat & breast and the prominent crest are the key features of the CHE.



Eagles (Non-Aquilas)

Changeable Hawk Eagle (Juv)



Juveniles are identified by Dark Beak, White underparts with faint markings varying individually

Eagles (Non-Aquilas)

Crested Serpent Eagle 1



Dark Brown Upperparts & Light Brown Underparts with Yellow Eyes and Cere are typically

7. Vultures

There are 6 species of Vultures found in Gujarat

1. **White Backed Vulture** (*Gyps bengalensis*)

- It was once upon a time the commonest of the vultures of Gujarat, now struggling for existence. It is still found nesting in few districts of Gujarat.

2. **Indian Vulture** (*Gyps indicus*)

- It is a resident of the rocky mountains of Gujarat. Usually seen around Girnar Mountains. Differentiated from other vultures by light brown body and black neck.

3. **Eurasian Griffon Vulture** (*Gyps fulvus*)

- This is a winter migrant to Gujarat that differs from other vultures by larger size, pale brown body and white head. Adults have white collar while juveniles have brown.

4. **Cinereous Vulture** (*Aegypius monachus*)

- It is another rare winter migrant to Gujarat which is identified by large size & Black body. Adults have pale cap and lighter black while juveniles are completely black.

7. Vultures

5. Egyptian Vulture (*Neophron percnopterus*)

- It is another vulture which used to be common resident now seen sparsely at various locations. Adults are white while juveniles are black. As the name suggests, it is not a true “GYPS” vulture

6. Red Headed Vulture (*Sarcogyps calvus*)

- It is a rare vulture for Gujarat which was observed to be nesting in past. Current status of this vulture is not known precisely. Adults have pink head and legs while the juveniles have paler heads.
- Note : There have been isolated records of Himalayan Vulture in Gujarat but there are very less authentic photographic evidence of the same available. If at all they are considered to be rare winter passage migrants to Kutch.

Vultures

White Backed Vulture (Adult)



White Backed Vulture (Juv.)



Vultures

White Backed Vulture – Adult in Flight

© Nirav Bhatt



Vultures

Indian Vulture



- Typically found around hills and nests on the edges of cliffs. Note the black neck.

Vultures

Eurasian Griffon Vulture (Adult)



Eurasian Griffon Vulture (Juv)



- Note the difference in the colour of the collar and the eyes.

Vultures

Eurasian Griffon Vulture (In Flight)



Vultures

Cinereous Vulture (Juv)



Vultures

Cinereous Vulture (Juvenile In flight)



Vultures

Egyptian Vulture (Adult)



Southern Race (Resident)

Egyptian Vulture (Juv.)



Northern Race (Migratory)

- Note the difference in the colour of the tip of the beak..

Vultures

Egyptian Vulture (In flight)



Vultures

Red Headed Vulture



Note : This picture is taken by Rahul Rao

8. Large Falcons

There are 4 species of Large Falcons found in Gujarat

1. **Peregrine Falcon** (*Falco peregrinus ssp.*)

- It is migratory falcon which is wide-spread throughout Gujarat and comes in good numbers. Usually prefers wetland habitats but adapts well to all the habitats including densely populated cities.

2. **Laggar Falcon** (*Falco jugger*)

- It is a rare resident falcon of Gujarat which prefers Arid & rocky habitats. Known to nest in Gujarat but more information is not available.

3. **Saker Falcon** (*Falco cherrug*)

- It is the largest and the rarest migratory falcon of Gujarat with isolated sightings in Kutch. It prefers vast dry open lands.

4. **Barbary Falcon or Red Naped Shaheen** (*Falco pelegrinoidus*)

- It is recently split from Peregrine as a separate species. This winter migrant is similar to Peregrine but smaller & compact built and as the name suggests, it has reddish nape and cheeks with faint red tinge on the underparts. Juveniles also similar to peregrine but with finer streakings and paler upperparts.

Large Falcons

Peregrine Falcon (Adult)



Peregrine Falcon (Juv.)



Large Falcons

Peregrine Falcon (Adult)



Peregrine Falcon (Juv.)



* Besides the colour, note the barring in Adult v/s broad and prominent streaking in Juvenile.

Large Falcons

Peregrine Falcon Adult Pair



- Note that Female on left is much larger and heavily built than the male on the right.
- This is called reverse dimorphism which is commonly observed in all the raptors

Large Falcons

Laggar Falcon (Adult)

Pic : Niranjan Sant



Laggar Falcon (Juv.)



- Note White Chest & Yellow cere & Feet of Adult V/s Brown chest & Pale cere & feet of Juvenile
- Note the size difference between the two adult birds.

Large Falcons

Laggar Falcon (Adult)



Laggar Falcon (Juv.)



Large Falcons

Saker Falcon



Large Falcons

Barbary Falcon (Adult)

Pic : Rahul Rao



Barbary Falcon (Juv.)

Pic : Saptagirish Oleti



- *Adult bird is compact but similar to Peregrine with Reddish nape & Reddish edges to Moustachial Stripe
- * Juveniles are also similar to Peregrine with finer streaks & may have reddish edges to moustachial stripe.

9. Small Falcons

There are 6 species of Large Falcons found in Gujarat

1. **Common Kestrel** (*Falco tinnunculus*)
 - It is one of the commonest migratory falcon of Gujarat. It is usually found perched on electric poles. Males have grey head & rufous upperparts with spots while females & juveniles are brownish with spots on the wings.
2. **Lesser Kestrel** (*Falco naumanni*)
 - It is a rare passage migrant to Gujarat usually found in arid habitats in winters. Similar to Common kestrel but has longer primaries projections & paler claws.
3. **Merlin** (*Falco columbarius*)
 - It is another beautiful and rare winter migrant to Gujarat. Found in arid habitats of Kutch, males have bluish grey upperparts & rufous underparts with fine streaks while the females & juveniles are brown.
4. **Eurasian Hobby** (*Falco subbuteo*)
 - It is an uncommon passage migrant to Gujarat found specifically during early winters and early summers. Adults have black upperparts & pale streaked underparts with rufous vent while juveniles have pale yellowish vent.

9. Small Falcons

There are 6 species of Large Falcons found in Gujarat

5. Amur Falcon (*Falco amurensis*)

- It is a uncommon passage migrant to Gujarat usually found in early winters and early summers. Males are sooty black with red beak, eye rings and legs while the females and juveniles are greyish above and white below with streakings.

6. Red Necked Falcon (*Falco chicquera*)

- It is resident falcon of Gujarat found more often breeding in Saurashtra & Kutch regions of Gujarat. Unlike most other small falcons, the sexes of Red Necked Falcon are alike. Adults have red head and neck, grey-blue upperparts and blue barred underparts. Like all the falcons, Red Necked falcon does not build a nest. They usually prefer discarded crow nest for nesting.

Small Falcons

Common Kestrel (Adult Male)



Lesser Kestrel (Adult Male)



* Note the black talons & primaries not reaching up to tip of tail in Common Kestrel

Small Falcons

Common Kestrel (Female)



Lesser Kestrel (Female)



* Note the Black Talons, Eye Stripe & shorter Primaries in Common Kestrel

Small Falcons

Merlin Male 1

Merlin Male 2



Small Falcons

Merlin Juvenile 1

Merlin Juvenile 2



Small Falcons

Eurasian Hobby
(Adult)



Eurasian Hobby
(Juvenile)



Eurasian Hobby
(Juvenile)



Small Falcons

Amur Falcon (Male)

Pic : Tom Beeke



Amur Falcon Female

Pic : Niranjan Sant



Small Falcons

Red Necked Falcon (Adult)



Red Necked Falcon (Juv)



Small Falcons

Red Necked Falcon Adult Female feeding Chick



10. Others

There are 2 species of 'Others' category raptors found in Gujarat

1. **Osprey** (*Pandion haliaetus*)

- It is a pure fish eating migratory raptor of Gujarat. It is fairly common and usually found throughout the waterbodies. It is one of those birds with single species in the family & genus.

2. **White Bellied Sea-Eagle** (*Haliaeetus leucogaster*)

- It is an uncommon resident eagle found through the shores of Gujarat. Large size, white underparts and grey wings make it unmistakable from other raptors. The juveniles are brown coloured and confusing at times.
- Note : There have been isolated records of Grey Headed Fish Eagle & Black Eagle in Gujarat but there are NO (or very less) authentic photographic evidence of the same available. If at all they are considered to be very rare.

Others

Osprey



Others

White Bellied Sea-Eagle (Adult)

Pic : Siddhesh Brahmanekar



White Bellied Sea-Eagle (Juv)

Pic : Niranjan Sant



Others

White Bellied Sea-Eagle (Adult)



Pic : Niranjan Sant



Pic : Niranjan Sant

Few Interesting
Individuals !!

Imperial Eagle Juvenile with Deformed Beak



Steppe Eagle with Gape Not Extending upto Centre of Eye



Peregrine Juvenile with unusually fine streaking (Probably Not 'Calidus')



Few Interesting
Comparisons !!

















FINAL SHOW DOWN

OF

Few of my favourite pictures







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Thank You!!



Special Thanks to “**NIRANJAN SANT**” & “**ALL OTHER WILDLIFE PHOTOGRAPHER FRIENDS**”
for kindly contributing their images for this presentation!