

# Australian Raptor Identification

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## What is a Raptor?

A raptor is usually defined as "a bird (such as an eagle or hawk) that kills and eats other animals for food". Falcons and kestrels are also regarded as raptors, even though they are now taxonomically regarded as being more closely related to cockatoos and parrots. Some people also include owls but I haven't in this presentation.

There are five families of birds that are regarded as raptors. Using BirdLife Australia's Working List of Australian Birds Version 2 (WLAB V2), the Australian raptors (birds of prey) belong to three families. There are 24 regular species (which all occur in Western Australia) plus five vagrants. These are :

<b>Osprey</b>	<b>Black-shouldered Kite</b>	<b>Letter-winged Kite</b>
<b>Black-breasted Buzzard</b>	<b>Square-tailed Kite</b>	Pacific Baza
<b>Wedge-tailed Eagle</b>	<b>Little Eagle</b>	<b>Swamp Harrier</b>
<b>Spotted Harrier</b>	Grey Goshawk	<b>Brown Goshawk</b>
<b>Collared Sparrowhawk</b>	<b>Red Goshawk</b>	<b>White-bellied Sea-Eagle</b>
<b>Whistling Kite</b>	<b>Brahminy Kite</b>	<b>Black Kite</b>
<b>Nankeen Kestrel</b>	<b>Australian Hobby</b>	<b>Brown Falcon</b>
Grey Falcon	<b>Black Falcon</b>	<b>Peregrine Falcon</b>

Oriental Honey-buzzard	Gurney's Eagle	Chinese Sparrowhawk
Japanese Sparrowhawk	Eurasian Hobby	

Most taxonomies split Osprey into Eastern Osprey (which is the bird in Australia) and Western Osprey (one vagrant record on Cocos Island); and Christmas Island Goshawk from Brown Goshawk.

In this presentation, I have taken the approach of comparing two species that can be confused, rather than describing each species separately. So I don't discuss Pacific Baza, Grey Goshawk, Grey Falcon and the vagrants. I only briefly discuss Black-breasted Buzzard and Red Goshawk separately.

Raptors can be some of the harder birds to identify. This document is designed to be read as a guide in conjunction with a slide show or Powerpoint presentation. It can be used as a check list with your field guide. This document is biased towards the raptors in Western Australia, and the south west to some extent.

Most raptors are fairly easy to identify, except that juvenile, immature and sub adults birds complicate matters. Juvenile plumage is often resolved by the presence of the adult birds.

## **Identifying Features of a Raptor?**

When you first see a raptor, you should look for several key features. Colour, size, silhouette, wings, tail, facial pattern, legs and jizz. A different set of features for different species. Other factors include the habitat and distribution.

**Colour** – You will immediately register the colour. This will enable you to easily identify adult Brahminy Kite, White-bellied Sea-Eagle, Osprey, Spotted Harrier, etc. A grey colour quickly cuts down the options. A white belly cuts down the options. etc.

**Size** – The size is an objective feature but there are species that the size can be a distinguishing feature. You should easily identify a Wedge-tailed Eagle on size. Size is an important factor in identifying Brown Goshawk and Collared Sparrowhawk, Nankeen Kestrel and Brown Falcon, Brown Falcon and Black Falcon, etc. Note that for many species, the female is significantly larger than the male.

**Silhouette** – The silhouette is the shape of the bird when gliding when viewed from the front. You look for whether the wings are upswept, horizontal or the tips are drooping. This is usually the first feature that you look for (you will have judged the colour and size already without thinking). Upswept wings (also known as a dihedral) are a feature of Wedge-tailed Eagle, White-bellied Sea-Eagle, Black-breasted Buzzard, Square-tailed Kite, harriers, Brown Falcon, Black-shouldered Kite and Letter-winged Kite.

**Wings** – There are several key features to look for in the wings. Are the wings pointed or rounded? Are there "fingers" pointing out of the tip of the wing? Pointed wings are falcons, kestrel, hobby, Black-shouldered Kite, etc. Eagles, kites, harriers and Black-breasted Buzzard have more rounded wings and they have fingers at the tip of the wings where the primary feathers extend. Are there distinctive patterns in the wings? A Black-breasted Buzzard has prominent diagnostic white "bullseyes" under the wing. A Letter-winged Kite has a diagnostic black "M" or "W" under the wings. A Black-shouldered Kite has black inner coverts on the upperwing. The underwing coverts of Whistling Kite, Square-tailed Kite, Little Eagle and Red Goshawk usually contrast with the rest of the underwing. A Spotted Harrier has black fingers.

**Tail** – The tail is also a key feature to look for. Is it long or short, narrow or wide, forked, square, rounded, barred? The tail is a key feature in distinguishing a Whistling Kite from a Little Eagle where the Little Eagle has a shorter wider tail. It is also an important feature in distinguishing a Brown Goshawk and a Collared Sparrowhawk where a Brown Goshawk has a rounded tail and a Collared Sparrowhawk has a squared tail often with a notch in the middle. The forked tail is almost diagnostic for a Black Kite. A wedged tail narrows it down to Wedge-tailed Eagle and White-bellied Sea-Eagle. A Black-breasted Buzzard has a short tail. Also look for barring on the tail although can often be difficult to see in the field. Some birds have fine barring such as Little Eagle. A Nankeen Kestrel has a black sub terminal band. A Spotted Harrier glides with a dihedral in the tail.

**Facial Pattern** – The facial pattern is a key feature for several species. The white face is diagnostic for a Square-tailed Kite. A black hood versus a black head is a key feature for distinguishing Peregrine Falcon and Australian Hobby. The facial "tear drop" is a key feature for Brown Falcon. The facial "disc" is a key feature for a harrier.

**Legs** – The legs can be a useful feature. Eagles have fully feathered legs while kites (including Whistling Kite) and White-bellied Sea-Eagle don't. The leg colour is worth noting, but it is not a key diagnostic feature for Australian raptors. A Collared Sparrowhawk has a middle toe that is much longer than the toes either side, but this is very difficult to see in the field, and a Brown Goshawk also has a middle toe longer than the toes either side.

**Jizz** – The "jizz" of a bird is a very objective feature that takes some experience to determine. This is the way a bird looks or behaves. Does it fly fast or slow? Does it hover? Does it soar high or fly low? Does it fly alone or in groups? Brown Falcons fly low

with deep wing beats while Black Falcons fly fast. Harriers fly low over grass or water when hunting. A Peregrine Falcon looks more solid than an Australian Hobby. Black Kites are often in flocks. Letter-winged Kites are often in small groups.

Some birds have other special diagnostic features. An adult Swamp Harrier has a white rump.

**Habitat** – The habitat is important for some species. Spotted Harriers are nearly always over grassland as they hunt for quail, button-quail, bush larks, songlarks, pipits, etc. Swamp Harriers are usually over wetlands. Whistling Kites in the south west are usually at or near wetlands. Falcons generally avoid forest and woodland. Red Goshawks are more common along watercourses, especially those lined by cadjebuts (melaleucas).

**Distribution** – The distribution is important for several species. Some are mostly restricted to the far north. Some are mostly restricted to coastal areas, or large areas of water. Some are more common inland.

## **Brown Goshawk vs Collared Sparrowhawk**

Accipters (the genus) around the world are amongst the hardest raptors to identify. The differences tend to be subtle. The two in Australia that cause problems are the Brown Goshawk and the Collared Sparrowhawk. The following table lists the features to look for to distinguish them.

Both species occupy the same habitat of forest, woodland and scrub. They are often found around waterholes where they may ambush their prey usually of small birds. They are both distributed across all of Australia, although the Brown Goshawk has a northern sub species *didimus* which is smaller and has a paler throat. They generally fly with broad rounded wings, although the "fingers" can be seen when the primaries are spread. The wings are usually flat when gliding, but they can have a slight dihedral when they are gaining height. You should be able to reliably separate these from the other raptors with a little experience.

	<b>Brown Goshawk</b>	<b>Collared Sparrowhawk</b>
<b>Size</b>	Larger	Smaller
<b>Tail</b>	Rounded	Square
<b>Eyebrow Ridge</b>	Prominent	No
<b>Eye Appearance</b>	Glare	Stare
<b>Legs</b>	Thicker	Thinner
<b>Middle Toe</b>	Long	Very Long
<b>Notched Tail</b>	No	Yes
<b>Call</b>	Like Sacred Kingfisher	Trill

**Size** – A Brown Goshawk is generally much larger than a Collared Sparrowhawk. This is complicated by a male Brown Goshawk only being slightly larger than a female Collared Sparrowhawk. So a female Brown Goshawk and a male Collared Sparrowhawk are usually distinguished by size. The *didimus* subspecies of Brown Goshawk complicates matters on the Mitchell Plateau as it is smaller and close to the size of a Collared Sparrowhawk.

**Tail** – A Brown Goshawk generally has a rounded tail, while a Collared Sparrowhawk generally has a squared tail. This can usually be seen if the bird is soaring, but it can be hard to see if the bird is flying past, and can be hard to see if the bird is perched. It can also be complicated if the tail is heavily worn or undergoing moult.

**Eye Appearance** – A Brown Goshawk has a prominent ridge immediately above the eye. This gives the impression that a goshawk "glares" (g for goshawk), while the sparrowhawk has no ridge and it gives the impression that a sparrowhawk "stares" (s for sparrowhawk). This can usually be seen only when the bird is perched.

**Legs** – The legs of a goshawk are generally thicker, but the difference between a male goshawk and a female sparrowhawk is not enough to see easily in the field.

**Middle Toe** – The middle toe of a sparrowhawk is much longer than the toes either side. The claw of a side toe does not reach the beginning of the claw of the middle toe. But the middle toe of a goshawk is also longer than the toes either side with the claw of a side toe reaching just past the beginning of the claw of the middle toe. So this feature is difficult to determine in the field.

**Notched Tail** – The centre of the tip of the tail of a Collared Sparrowhawk often appears notched.

**Call** – The calls are very different. To me, the common call of a Brown Goshawk sounds very similar to a Sacred Kingfisher.

## **Swamp Harrier vs Spotted Harrier**

Harriers around the world have a number of common features. They all have a very similar jizz, including having a distinct dihedral and generally flying low when hunting. Most harriers have a distinct facial disc. It does not take much experience to be able to distinguish a harrier from other raptors. Adult Swamp Harriers and Spotted Harriers are usually easy to identify. The immatures can be more difficult.

	<b>Swamp Harrier</b>	<b>Spotted Harrier</b>
<b>Wings</b>	Upswept	Upswept
<b>Facial Disc</b>	Less distinct	Distinct
<b>Wing Tips</b>	Barred	Black
<b>White Rump</b>	Yes	No
<b>Tail</b>	Flat	Curved
<b>Tail Bars</b>	Less distinct	Distinct

**Facial Disc** – The facial disc usually appears more obvious for a Spotted Harrier.

**Wing Tips** – A Spotted Harrier has distinct black fingers, although this can be less obvious in immatures.

**White Rump** – An adult Swamp Harrier has a distinct white rump that is usually fairly easy to see in flight. This feature is much less or even almost absent on a young Swamp Harrier.

**Tail** – A Spotted Harrier has a tail with a dihedral when it is hunting or gliding. You need to look for it, and it can be difficult to see at times. Both harriers have dark bands in the tail, which are further apart and more distinct for a Spotted Harrier. This feature can be difficult to see in the field.

**Juveniles** – A juvenile Swamp Harrier has a strong contrast between the deep rufous body and underwing coverts and the white patch at the base of the primaries, and it has a tawny rump which is often hard to see. A juvenile Spotted Harrier is very buffy, while a young immature is streaked on the underparts with pale fringes on the wings.

**Sexual Dimorphism** – Most harriers in the world have separate plumages for adult males and females. Female Swamp Harriers are redder underneath and the barring on the tail is more distinct. Males get paler underneath with age, lose the barring on the tail and get a darker hood. Spotted Harriers are an exception and you cannot distinguish sex other than by size.

**Habitat** – Swamp Harriers are usually found close to wetlands, although they can be found over grassland in the north during the wet season. They hunt ducklings, coots, etc often by landing on them and drowning them. Spotted Harriers generally hunt low over grassland looking for quails, button-quails, Horsfield's Bushlark, songlarks, pipits, etc.

**Distribution** – Swamp Harriers are uncommon in the Kimberley, especially during the dry season, and because there are few wetlands they are very uncommon in the dry inland. Spotted Harriers are uncommon in the south west, especially the Swan Coastal Plain and the far south west.

## Australian Hobby vs Peregrine Falcon

These are both falcons with the typical pointed wings of a falcon. They are also typical falcons in that they hunt by flying fast.

	<b>Australian Hobby</b>	<b>Peregrine Falcon</b>
<b>Size</b>	Smaller	Larger
<b>Pointed Wings</b>	Yes	More rounded
<b>Head</b>	Small tear drop	Black hood
<b>Neck</b>	Reddish brown	Bright white
<b>Bill, Eye Ring</b>	Grey	Yellow
<b>Underparts</b>	Reddish, Streaked	Fine bars
<b>Back</b>	Darker	Slaty

**Size** – A Peregrine Falcon (35-50cm) is significantly larger than an Australian Hobby (30-35cm), although a male Peregrine is only slightly larger than a female hobby. A female Peregrine Falcon is considerably larger than a male, while the difference is much less for Australian Hobbys. A Peregrine Falcon also has a deeper chest.

**Pointed Wings** – An Australian Hobby has more narrow pointed wings, while a Peregrine Falcon has broader and more rounded wings.

**Head** – A Peregrine Falcon has a black hood, while an Australian Hobby has a dark cap and face with a “tear drop”.

**Neck** – An adult Peregrine Falcon has a bright white side of the neck, or partial collar, although in the south west the colour is often more buff. The pale buff or sometimes reddish brown collar of an Australian Hobby continues further and curves around behind the eye. If you did happen to see a Peregrine Falcon with the white of the collar extending up into the cheek, then it is a vagrant from Asia (a few records on Ashmore Reef and maybe one in Western Australia).

**Bill** – An adult Peregrine Falcon has a yellow base of the bill and a yellow eye ring. These are grey for an Australian Hobby, but note that a juvenile Peregrine Falcon can also have a grey bill and eye ring.

**Underparts** – The underparts of an adult Peregrine Falcon is finely barred, while a hobby is much more reddish and streaked, but again note that this is also true to a lesser extent for a juvenile Peregrine Falcon. Australian Hobbys are slightly paler in the north (say north of the Murchison River, Kalgoorlie and Esperance) and inland, as they are a different subspecies.

**Back** – The back of an adult Peregrine Falcon is a slaty grey and is darker than an Australian Hobby.

**Tail** – Relative to its size, a Peregrine Falcon appears to have a shorter, broader tail.

**Pale Fringes** – This feature you would normally only notice in a photograph. Sometimes you can see fine pale fringes on the wing feathers of a Peregrine Falcon. An Australian Hobby does not show fringes except that a juvenile has rufous fringes.

**Jizz** – A Peregrine Falcon is a fast powerful flier especially when hunting, although it takes some experience to judge this. A Peregrine Falcon usually hunts birds up to the size of small ducks. An Australian Hobby does hunt smaller birds, but it often catches dragonflies, and it often hunts until it is almost dark.

## Nankeen Kestrel vs pale Brown Falcon

The Nankeen Kestrel and the Brown Falcon are both falcons. The Nankeen Kestrel is typical of a group of falcons which are smaller and usually hunt by hovering. The Brown Falcon is largely an anomaly as it flies much slower than other falcons. You should not have too many problems distinguishing these two species, but occasionally you will see a bird perched in the mid distance and be uncertain whether it is a Nankeen Kestrel or a pale Brown Falcon.

	<b>Nankeen Kestrel</b>	<b>Brown Falcon</b>
<b>Size</b>	Smaller	Larger
<b>Facial Markings</b>	Single tear drop	Double tear drop
<b>Flight</b>	Flat	Upswept
<b>Flight</b>	Hovers	Slow
<b>Tail Band</b>	Yes	No
<b>Trousers</b>	White	Dark
<b>Upperparts</b>	Red with black spots	Brown
<b>Legs</b>	Yellow	Grey

**Size** – A Brown Falcon (40-50cm) is considerably larger than a Nankeen Kestrel (30-35cm), but size can be difficult to determine in the distance.

**Facial Markings** – Both species have a malar stripe leading down from the base of the bill below the eye, but it is darker and hence more prominent in a Brown Falcon. This is commonly called a “tear drop”. The Brown Falcon has a second stripe from behind the eye.

**Flight** – You should never have a problem distinguishing these species in flight. A Nankeen Kestrel glides on flat pointed wings and it can hover very efficiently (the best of all the Australian raptors). A Brown Falcon flies slowly with deep wing beats and the wings are not as sharply pointed. A Brown Falcon glides with upswept wings. A Nankeen Kestrel has black upper primaries in flight, and has pale almost white under wings. A Brown Falcon has evenly coloured upperwings and underwings.

**Tail** – A Nankeen Kestrel has a black subterminal tail band. This is usually easy to see in flight but it can be difficult to see when the bird is perched and the tail is covered by the wings.

**Legs** – A Nankeen Kestrel has white “trousers” on the upper legs while a Brown Falcon usually has dark or reddish trousers. A Nankeen Kestrel has yellow legs, while a Brown Falcon has grey legs.

**Upperparts** – A Nankeen Kestrel has distinctively rufous upperparts and black primaries.

**Sexual Dimorphism** – The Nankeen Kestrel is one of only a few Australian raptors that has sexually dimorphic plumage. A male Nankeen Kestrel has a pale grey head and tail (except for the black band) while the female is rufous.

## **Osprey vs immature White-bellied Sea-Eagle**

You might be surprised that I have included these two species. Inexperienced people do have trouble distinguishing an Osprey from an immature White-bellied Sea-Eagle. They are very distinctive but they can cause some doubt if they are in the distance. An adult White-bellied Sea-Eagle is very distinctive and is not considered in this comparison.

	<b>Osprey</b>	<b>Immature Sea-Eagle</b>
<b>Size</b>	Smaller	Much larger
<b>Wings</b>	Flat	Upswept
<b>Wings</b>	Narrower	Broader
<b>Tail</b>	Square	Wedge
<b>Facial Marks</b>	Yes	No

**Size** – A White-bellied Sea-Eagle (70-90cm) is significantly larger than an Osprey (50-65cm), and so it is a surprise that people can get them confused.

**Wings** – An Osprey gildes on flat wings (actually slightly drooping with uplifted wing tips). A White-bellied Sea-Eagle has very distinctive upswept wings. A White-bellied Sea-Eagle has broader wings, but this is fairly subjective and takes experience by which time you will probably not be having any difficulties distinguishing the two species.

**Tail** – An Osprey has a square tail. A White-bellied Sea-Eagle has a wedged tail that often makes you think of a Wedge-tailed Eagle (see next comparison).

**Facial Markings** – An Osprey has a mostly white face with a dark line through and behind the eye. A female has a brownish band across the lower throat, while this is less distinct for a male. An immature White-bellied Sea-Eagle has a uniformly whitish coloured head.

**Hunting** – The Osprey feeds by plucking fish from near the surface. The White-bellied Sea-Eagle can catch fish, but it will attack birds and animals (especially if they are injured) and they will sometimes feed on carrion. They will catch sea snakes. I have seen a White-bellied Sea-Eagle feeding on a very freshly killed Australian Bustard on 80 Mile Beach which clearly it had killed either on the beach or possibly nearby inland and carried it to the beach.

**Distribution** – Both species mostly occur along the coast, but they can occur inland along waterways and wetlands, more so the White-bellied Sea-Eagle. The Osprey is very uncommon in Victoria and Tasmania.

## Wedge-tailed Eagle vs White-bellied Sea-Eagle

You should not have a problem distinguishing these two species if you get a good look at the bird, but a juvenile White-bellied Sea-Eagle can superficially look like a Wedge-tailed Eagle from a distance in flight when it can appear that a White-bellied Sea-Eagle has a wedged tail.

	<b>Wedge-tailed Eagle</b>	<b>Juvenile Sea-Eagle</b>
<b>Size</b>	Larger	Smaller
<b>Upswept Wings</b>	Tips higher	Curved
<b>Wedge Tail</b>	More pointed	Yes
<b>Wing Patches</b>	Not distinct	Yes
<b>Head</b>	Rufous crown, mantle	Paler than body
<b>Tail</b>	Dark	Black terminal band
<b>Trousers</b>	Full	Half

**Size** – A Wedge-tailed Eagle (90-110cm) is larger than a White-bellied Sea-Eagle (70-90cm). This is often enough to identify the bird.

**Wings** – Both species have upswept wings. A White-bellied Sea-Eagle has wings in a continuous curve with short “fingers” that sometimes are not apparent. A Wedge-tailed Eagle has upswept wings that are straighter rather than curved and not held as high, and with longer fingers the tips usually seem to point up. An immature White-bellied Sea-Eagle has distinct pale patches in the under wing at the base of the primaries. Immature Wedge-tailed Eagles can have paler areas under the wing, but mostly the underwing coverts.

**Tail** – Both species have a wedged tail, but it is more distinctive and pointed for a Wedge-tailed Eagle. The tail is uniformly coloured for a Wedge-tailed Eagle while it is white for an immature White-bellied Sea-Eagle and white with a wide terminal dark band for a juvenile.

**Legs** – A Wedge-tailed Eagle has fully feathered legs (trousers) like all true eagles, while only the upper part of the legs of a White-bellied Sea-Eagle are feathered.

**Habitat** – The White-bellied Sea-Eagle is most common along the coast, but it does occur along rivers and near large wetlands. The Wedge-tailed Eagle is more common inland. So they don't overlap in many places.

Note that the decision is whether a juvenile White-bellied Sea-Eagle might be an immature Wedge-tailed Eagle. I have never thought an immature Wedge-tailed Eagle might be a White-bellied Sea-Eagle.

## Whistling Kite vs Black Kite

Whistling Kites are also common in areas that Black Kites occur. They look superficially similar. They have a similar size and wingspan. They have a very similar silhouette.

	<b>Whistling Kite</b>	<b>Black Kite</b>
<b>Tail</b>	Long, rounded, paler	Wider, forked, darker
<b>Underwing</b>	Patterned	Little pattern
<b>Wings</b>	Slightly bowed	Flat
<b>Legs</b>	Greyish	Yellowish
<b>Facial Pattern</b>	Plain	Darker ear patch

**Tail** – A Whistling Kite has a long, uniformly pale coloured and narrow tail rounded at the corners. A Black Kite has a slightly shorter, wider tail which is usually forked unless it is heavily worn or spread. The tail is darker than a Whistling Kite. A Black Kite often twists its tail in flight to maintain its position when gliding.

**Underwing** – The underwing of a Whistling Kite shows pale secondaries and underwing coverts. A Black Kite can have pale patches under the wing, but they are not as distinct as an adult Whistling Kite.

**Wings** – A Whistling Kite has slightly bowed wings when soaring. i.e. the centre of the wing is very slightly higher than the body. A Black Kite has flat wings when it soars. But that assumes that you see the bird flying straight towards you.

**Colour** – A Black Kite is generally darker than a Whistling Kite, especially the under parts, but this takes some experience to be a reliable feature.

**Legs** – A Whistling Kite has grey legs and bill, while a Black Kite has yellow legs and a yellow base to the bill.

**Facial Pattern** – A Black Kite has a slightly darker “ear patch” just behind the eye, while the the ead colour of a Whistling Kite is uniform.

**Distribution** – In Western Australia, Black Kites are rare to uncommon south of Carnarvon and Meekatharra.

**Habitat** – In the south west, Whistling Kites are usually found at or near wetlands. But further north they are one of the most common raptors in open country, although Black Kite can also be common. They are usually both common at rubbish tips, although the Black Kite is usually the most common.

**Flocks** – Black Kites often congregate in large numbers, especially near grass fires and rubbish tips. Whistling Kites can group together but not as often and not in the same numbers.

**Hunting** – Whistling Kites and Black Kites generally eat similar prey, but a Whistling Kite is also capable of catching fish. They both sometimes feed on carrion including road kill.

## **Whistling Kite vs Little Eagle**

An adult Little Eagle is reasonably easy to identify, especially the dark morph. The adult light morph Little Eagle has a very distinct white "M" under the wings. A juvenile light morph Little Eagle can look similar to a Whistling Kite. You will make mistakes, especially when the bird is mid distance, but with experience you will make fewer mistakes.

	<b>Whistling Kite</b>	<b>Little Eagle</b>
<b>Tail</b>	Longer, rounded, pale	Shorter, wider, greyish
<b>Tail</b>	Not barred	Finely barred
<b>Wings</b>	Slightly bowed	Flat
<b>Underwing Coverts</b>	Pale	Reddish
<b>Trousers</b>	No	Yes

**Tail** – A Whistling Kite has a long, uniformly pale coloured, narrow tail rounded at the corners. A Little Eagle has a shorter, wider, greyish tail that is finely barred although the barring is difficult to see in the field.

**Wings** – A Whistling Kite when it soars has wings that are slightly raised near the middle with wing tips usually slightly uplifted. A Little Eagle soars on flat wings with the fingers possibly being slightly raised. A Whistling Kite has pale or white inner primaries, although this is less distinct in immature birds. The underwing coverts of a Whistling Kite are a pale sandy colour, and they are rufous or reddish for a Little Eagle.

**Legs** – A Little Eagle has fully feathered legs even though it is not a true "*Aquila*" eagle. The legs are only partly feathered for a Whistling Kite. This feature is usually fairly easy to see when the bird is perched.

**Habitat** – Whistling Kites in the south west are nearly all found around wetlands, which is surprising as they are often the most common raptor in the dry north. So you are extremely unlikely to see a Whistling Kite in wooded or forested areas. Little Eagles will raid nests for food, and so it is seldom that you will find a similar raptor within about 1km of a Little Eagle nest. A Square-tailed Kite's nest that I knew of in the Stirling Range was abandoned when a pair of Little Eagles moved their nest to about 300 metres away.

## **Square-tailed Kite vs light morph Little Eagle**

A Square-tailed Kite and a light morph Little Eagle are really quite different, but they look somewhat similar if you are inexperienced.

	<b>Square-tailed Kite</b>	<b>Little Eagle</b>
<b>Tail</b>	Square; dark terminal band	Barred; broader
<b>Face</b>	White; smaller bill	Sandy; heavier bill
<b>Wings</b>	Slightly upswept	Flat
<b>Wing Tips</b>	Barred, longer	Black
<b>Trousers</b>	No	Yes
<b>Underwing</b>	Patterned	Pale M pattern

**Tail** – A Square-tailed Kite has a thin dark terminal band on the tail, and the tail usually looks square no matter how spread it is. The tail of a Little Eagle is barred, and is usually broader and slightly curved except when it is almost fully closed.

**Face** – The white face of a Square-tailed Kite is almost diagnostic. A pale morph Little Eagle has a sandy coloured head, and the bill is much heavier.

**Wings** – A Square-tailed Kite flies with slightly upswept wings. This is diagnostic. Nothing similar has upswept wings. A Little Eagle glides on flat wings, sometimes slightly drooped. A Little Eagle has dark almost black primary tips. A Square-tailed Kite has longer paler fingers usually with noticeable bars, although a juvenile does have darker wing tips.

**Trousers** – A Little Eagle has fully feathered legs even though it is not a true “*Aquila*” eagle. The legs are only partly feathered for a Square-tailed Kite.

**Underwing** – A light morph Little Eagle has a distinctive pale “M” pattern on the underwing. They both have rufous lesser underwing coverts, but this is more extensive for a Square-tailed Kite.

**Distribution** – Square-tailed Kites migrate from the south west, and are very uncommon in the south west from June to August. The south west in spring / summer is the region and time of year where they are most common. Possibly due to climate change, some Square-tailed Kites seem to over winter now in the south west.

**Habitat** – Square-tailed Kites hunt birds in forest and open woodland. They often fly very low over the tree tops. They can also hunt low over heathland. Little Eagles can also take birds as food, but this tends to be more often at the nest sites including nestlings, rather than chasing or ambushing their prey.

## **Juvenile Brahminy Kite vs Little Eagle**

An adult Brahminy Kite is unmistakable. An immature Brahminy Kite is similar to a Whistling Kite, but the reddish belly has usually started to show. A juvenile Brahminy Kite can fool you as you don't see them very often. When perched a juvenile Brahminy Kite looks very similar to a juvenile Black Kite or juvenile Whistling Kite. They are easier to identify in flight when it looks more like a pale Little Eagle.

	<b>Juv. Brahminy Kite</b>	<b>Little Eagle</b>
<b>Tail</b>	Wings same length as tail	Tail extends beyond wings
<b>Tail</b>	Dusky terminal band	Lightly barred
<b>Wings</b>	Slightly raised	Flat
<b>Legs</b>	Yellow	Grey
<b>Underwing "M"</b>	Less distinct	Distinct
<b>Breast</b>	Dark	Pale

**Tail** – When perched, the wings of a Brahminy Kite extend to the tip of the tail, while for a Little Eagle (and Whistling Kite and Black Kite) the tail extends past the end of the wings. A juvenile Brahminy Kite has a dusky terminal band on the tail, while a Little Eagle has a uniform lightly barred tail.

**Wings** – A Brahminy Kite soars with flat wings that are slightly raised from the body. A Little Eagle soars with flat wings although the fingers can be raised.

**Legs** – A Brahminy Kite has half feathered yellow legs while a Little Eagle has fully feathered grey legs.

**Underwing "M"** – The "M" on the underwing of a light morph Little Eagle is sharp and distinct and quite diagnostic. A juvenile Brahminy Kite has a much less distinct "M" on the underwing. A Little Eagle has rufous underwing coverts while they are much more brown on a juvenile Brahminy Kite.

**Breast** – A juvenile Brahminy Kite has a dark brown (slightly reddish) breast while a light morph Little Eagle has a pale breast.

**Distribution** – Brahminy Kites are usually found along the coast as far south as Carnarvon, but I have seen them along the North West Coastal Highway near Karratha about 20km inland, and near Lake Argyle. They are a common inland bird in many parts of south east Asia.

## **Black Falcon vs dark Brown Falcon**

A Black Falcon can be difficult to distinguish from a dark Brown Falcon, especially just from a photograph. They are distinctive and with experience you should become confident identifying them. A Black Falcon is more of a dark sooty brown to sooty black colour. It is generally an uncommon bird, and so experience is difficult to attain.

	<b>Black Falcon</b>	<b>Brown Falcon</b>
<b>Size</b>	Larger	Smaller
<b>Facial Markings</b>	Very little	Double tear drop
<b>Flight</b>	Flat	Upswept
<b>Flight</b>	Fast	Slow
<b>Trousers</b>	Longer	Shorter
<b>Tail</b>	No bars	Barred

**Size** – A Black Falcon (45-55cm) is larger than a Brown Falcon (40-50cm), although wingspans are comparable (95-110cm vs 90-120cm). It looks more powerful and heavier.

**Facial Markings** – A Brown Falcon has a distinctive “tear drop” behind the eye, but this is much less distinctive (and sometimes not apparent at all) for dark birds. A Black Falcon has no distinctive facial markings.

**Flight** – A Black Falcon is a powerful bird in flight. It usually hunts birds. It glides on slightly drooping wings. A Brown Falcon has a slower flight with deep wing beats and it glides with upswept wings. Flight is the most distinctive feature between these two species. A Black Falcon will sometimes soar, while Brown Falcons more often perch.

**Legs** – A Black Falcon has longer “trousers”, but this is difficult to determine in the field.

**Distribution** – In Western Australia, the Black Falcon is an uncommon bird in the Kimberley, north Pilbara and northern inland. It is rarely recorded as far south as Carnarvon and Meekatharra.

**Hunting** – The Black Falcon is one of the main predators of Flock Bronzewing. It strongly prefers hunting over open country such as plains or along the edges of wetlands. A Brown Falcon will take birds but it more often catches grasshoppers, small mammals and reptiles and it will feed on carrion. It has been known to take larger prey such as small rabbits, snakes and monitors.

Other birds can identify them easily, and they are very nervous in the presence of a Black Falcon, while they would be comfortable around a Brown Falcon.

In summary, Black Falcons and Brown Falcons are distinctive and with experience you will learn to confidently identify them. As a general rule, if you are in doubt it will probably be a Brown Falcon.

## **Black-shouldered Kite vs Letter-winged Kite**

Black-shouldered Kites and Letter-winged Kites are very similar. They belong to the same genus *Elanus*. They have the same silhouette, and very similar flight patterns. They look extremely similar when they are perched.

	<b>Black-shouldered Kite</b>	<b>Letter-winged Kite</b>
<b>Wing Pattern</b>	Small black patch	Long black patch
<b>Eye Patch</b>	Front and behind	Front only
<b>Cere</b>	Yellow	Dark grey, brown
<b>Crepuscular</b>	No	Yes
<b>Distribution</b>	Widespread	Mostly northern inland
<b>Groups</b>	Singles or pairs	Often in small groups

**Wing Pattern** – This is the diagnostic feature. A Black-shouldered Kite has a short black patch on the inner upperwing coverts, and the primary coverts of the underwing. A Letter-winged Kite has a similar short black patch on the upperwing coverts, and a black band on the underwing.

**Eye Patch** – This is the main feature to look for when the bird is perched. A Black-shouldered Kite has a black patch in front of the eye and it extends just above the eye and behind the eye. A Letter-winged Kite only has the patch in front of the eye.

**Cere** – This is the base of the upper bill. A Black-shouldered Kite has a yellow cere, while a Letter-winged Kite has a grey or grey brown cere. This is quite a small and you may need a scope to see it reliably.

**Crown** – The crown of a Letter-winged Kite is greyer than a Black-shouldered Kite but the difference is not great and you have to be careful of light conditions.

**Legs** – The legs of a Black-shouldered Kite are yellower than a Letter-winged Kite.

**Crepuscular** – A Letter-winged Kite is largely crepuscular. That is, it feeds mainly in the late afternoon & early evening and similarly near dawn. So if you see a bird flying during the day, it is almost certainly a Black-shouldered Kite unless it has just been flushed.

**Distribution** – Letter-winged Kites are usually confined to the interior. In very good times their numbers increase and they can spread out sometimes reaching the coast. Similarly in extreme harsh times they can spread to the coast.

**Groups** – Letter-winged Kites often congregate in small numbers, especially when breeding. It is unusual to see a group of Black-shouldered Kites.

## **Black-breasted Buzzard**

This is not a true buzzard, and some people for this reason call it a Black-breasted Kite. It is very distinctive in flight and is one of the easier Australian raptors to identify, even as an immature.

	<b>Black-breasted Buzzard</b>
<b>Tail</b>	Short, square
<b>Underwing</b>	Bullseyes
<b>Wings</b>	Upswept

**Wings** – This is the diagnostic feature when the bird is in flight. A Black-breasted Buzzard has very distinct white patches under the wing, often called bullseyes. They fly with a strong dihedral that with experience is unlike any other Australian raptor.

**Tail** – The tail is quite short and square, and again is quite distinctive compared to other Australian raptors.

## **Red Goshawk**

Red Goshawk is one of Australia's least common raptors. It is about the size of a Square-tailed Kite or a Little Eagle. It is a different genus and larger than the *Accipiters* which include the other goshawks, and is distinctive from the other Australian raptors. The closest is possibly a Square-tailed Kite but I doubt that you confuse them.

	<b>Red Goshawk</b>
<b>Head</b>	Streaked
<b>Trousers</b>	Red
<b>Underwing</b>	Barred; red coverts
<b>Tail</b>	Barred

**Head** – The head is finely streaked.

**Trousers** – The trousers are red.

**Underwing** – The underwing coverts are red and the rest is barred.

**Tail** – The tail is also barred.

**Upperparts** – The feathers of the upperparts are fringed red.

The female has a paler red breast with a few fine black streaks. The male is much smaller and has a reddish wash with fine black streaks.

The Red Goshawk is quite a large raptor (shorter wingspan than Square-tailed Kite but about the same length and the female is heavier). It catches birds as its main source of food, and it is capable of catching lorikeets in flight. In Western Australia it occurs only in the north Kimberley, usually along watercourses lined by tall cadjebuts (melaleucas).

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