

Bird Identification Series:

Differentiating wintering Adult from Juvenile (First-winter) Tiger Shrikes

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An old issue but one with continuing queries about why so many of the Tiger Shrikes *Lanius tigrinus* arriving in autumn are juveniles and so few are adults could do with being re-visited. Here is a brief clarification.

Tiger Shrikes are among the few passerine birds so far shown to moult completely twice per year. Among adults, the first of these moults produce the striking, unmistakable breeding plumage, to be seen in our region from early March, before these birds migrate north. As revealed from recapture of ringed individuals (Wells 2007), the second moult, evidently completed shortly before migrants arrive in autumn, produces a range of plumage types, by far the commonest of which is an 'alternate' plumage that closely resembles the first-winter plumage of juveniles (hence the confusion!). More rarely, this incorporates varied amounts of what resembles breeding plumage.

A search of the Macaulay Library Internet Bird Collection image database (2023) for photographs from Malaysia, with custom filter set for those dated August through November, produced 211 Tiger Shrike images uploaded from our region. Of these, 66 were duplicates, two were text or sonogram only, 16 were not adequate for analysis, and one was of a misidentified Brown Shrike. The remaining 126 included 62 juveniles (first-winterers) and 64 adults only 10 of which showed one or more features resembling breeding plumage. Only four of these 10 adults showed extensive to full breeding-type plumage. Perhaps it is time finally to recognise that the common winter plumage-type of adults occurring in Malaysia is the full 'alternate' plumage, and that perhaps half of the 'juveniles' identified are actually adults.

How then can they be separated? Not easy (see Table 1), but among early-winter birds a useful independent short-cut to age-class is bill colour: dull blue with black tip in adults versus conspicuous pale pink with black tip in juveniles. Otherwise, fully alternate-plumaged adults are separable from juveniles virtually only by the following: (a) white of eye-ring more obviously expanded into patch behind eye; (b) primary coverts normally (but not always) plain, versus in juveniles invariably pale-tipped; (c) cap plain cocoa brown, dark barring, if present at all, confined to its anterior edge, versus in juveniles cap the same brown but black-barred throughout, each black bar accentuated by pale feather tip. By about mid-winter this last distinguishing character tends to disappear as both age-classes lose all cap barring to feather wear, which then exposes white feather shafts instead.

The next potential features to check for are the commonest 'intermediate' characters of winter adults. The easiest one to pick up in the field is: dark base to ear-covert feathers which, despite pale feather tipping, gives a shadowy impression of a mask. The second is a varied scattering of plain pale grey feathers on the brown cap, but this is hard to detect in the field other than in a good photo image.

Table 1: Comparison of the key features differentiating first winter (juvenile) from adult winter Tiger Shrikes (Wells 2007, Lefranc & Worfolk 2022).

Feature	First Winter (Autumn Juvenile)	Winter-Plumage Adult
Bill	Pale pink bill with black tip.	Dull blue bill with black tip.
Crown/Cap	Brown but black-barred throughout, each black bar accentuated by pale feather tip.	Plain cocoa brown. Dark barring, if present at all, confined to its anterior edge.
Eye-ring	-	White of eye-ring more obviously expanded into patch behind eye.
Ear-covert feathers (face-mask behind eye)	Pale-tipped.	Pale-tipped but more basal black than usual in juveniles, dark enough to create a shadow mask.
Primary coverts	Always pale tipped.	Plain, only occasionally pale tipped.

There are, of course, still a good number of unknowns:

1. Nothing has yet been discovered about any sexual differences in the plumage sequence.
2. Nor is anything yet known about what determines the combination of plumage characters produced by a bird's autumn moult.

It has been speculated that this might relate to the date at which that particular moult started (Wells, 2007), but it has been noticed that in spring some individuals depart without having moulted fully into breeding-type plumage. That in turn suggests age might be a determining factor. If breeding plumage takes more than one annual cycle to develop fully perhaps the type of winter plumage produced by an individual Tiger Shrike also evolves over the course of more than one of its annual cycles – possibly away from the full 'alternate' state towards an accumulation of breeding-type characters. Tiger Shrikes have been recorded as showing philopatry in Malaysia, returning to their previous wintering site in successive years. More about some of these unknowns could certainly be learned from following such wintering individuals, especially if they have been ringed.

Plate 1 and 2 shows comparisons between autumn juvenile/first-winterer with winter adult in full 'alternate' plumage; all were seen in the September to November period in Ipoh, Perak, Malaysia. Note that it is not always that easy to differentiate them and that the 'alternate' winter-plumage adult may have some pink at the base of the bill. But the darker face-mask behind the eye and the lack of pale tipped primary coverts help in the identification of the adults.

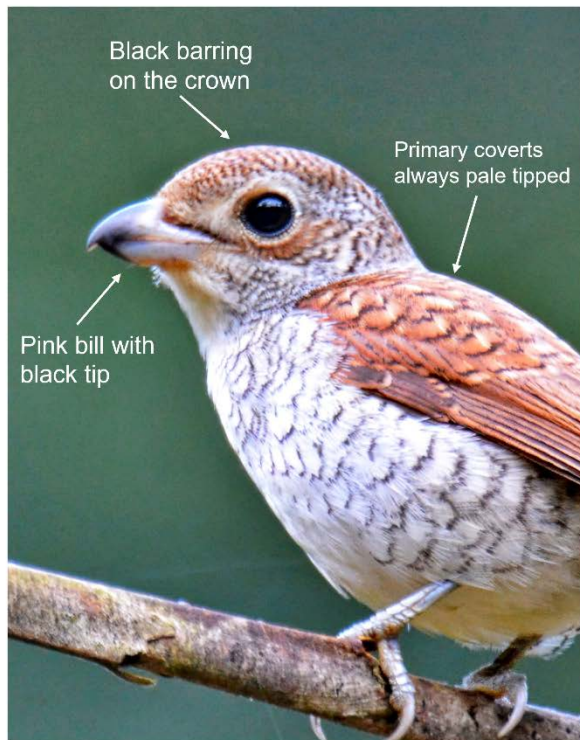


Plate 1: Autumn juvenile/first-winterer Tiger Shrike; key features illustrated

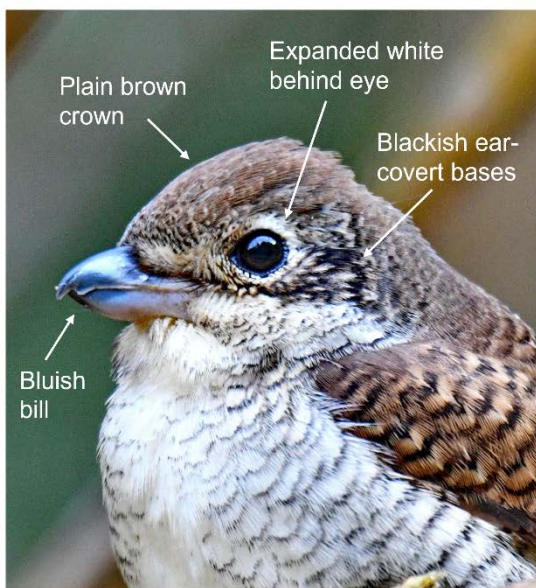


Plate 2: Winter adult Tiger Shrike in full 'alternate' plumage; key features illustrated

Plate 3 shows an adult bird observed in November at Ipoh, Perak, Malaysia, which shows the 'expected' adult winter plumage. Note the blue-grey bill, the plain grey head/crown and dark face mask. Note also the extensive black-barred underparts.

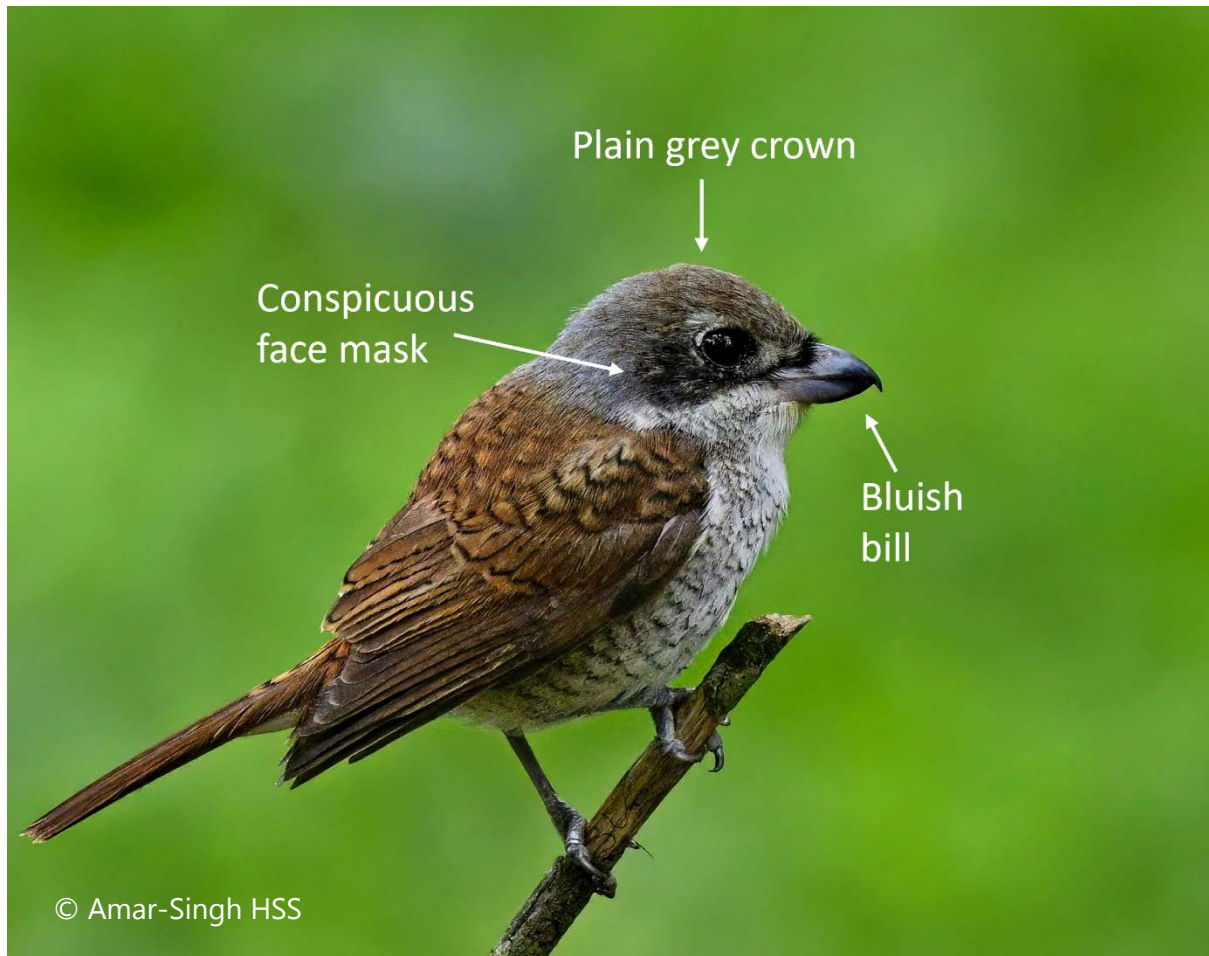


Plate 3: Winter adult showing breeding-type features; key features illustrated

References

1. Wells, D.R. (2007). *The Birds of the Thai-Malay Peninsula: Vol. 2 (Passerines)*. London: Christopher Helm.
2. Lefranc, N. & Worfolk, T. (2022). *Shrikes of the World*. Helm identification guides. USA: Bloomsbury.
3. Macaulay Library (2023). Tiger Shrike *Lanius tigrinus* images in Malaysia. *Cornell Lab of Ornithology*. [online] Data extracted 04 October 2023.

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