

# Field identification of female and juvenile Montagu's and Pallid Harriers

Dick Forsman

Of the two smaller species of Western Palearctic harriers *Circus*, Montagu's Harrier *C pygargus* and Pallid Harrier *C macrourus*, the females and juveniles (the so-called 'ringtails') are notoriously difficult to identify in the field. Since Svensson's (1971) classic paper, which still remains the most comprehensive treatment of the subject, very little has been added to their identification. New underwing characters of the secondaries were presented by Svensson (in Cramp & Simmons 1980) and the identification has also been dealt with in depth by Forsman (1984, 1993), Génsbøl (1986) and Delin (1989). The most recent treatments are those by Lewington et al (1991) and Jonsson (1992).

This paper focuses on the field identification of these species, adding some important new field characters. These new characters, especially those of the primaries, will hopefully reduce field identification problems in the future.

The paper is based on studies of skins in the Natural History Museum at Tring, England, and the zoological museums of Stockholm, Sweden; Copenhagen, Denmark; and Helsinki, Finland. I have further analysed 100s of photographs of both species and carried out extensive field studies, mainly in Finland, Israel, Kazakhstan, Sweden and Turkey, during the last 10 years. All characters have been tested in the field to assess their value as field identification characters.

## Important characters

By far the most important characters to look for when identifying ringtail harriers are the features of the underwing, especially those of the primaries. *Every individual can be positively identified if the underwing is seen well.* Another important, although slightly less reliable character is the head pattern. For adult females, the upperwing as well as the type of body streaking are of importance, whereas in juveniles ground colour and occurrence of streaking on the body may play an important role for the identification. Even the flight silhouette can be diagnostic, especially in adults. In the following, plumage tracts are

listed in order of importance to enable quick reference and facilitate comparison between the species. However, the importance of the different characters varies between plumages and species and may hence be presented in a slightly varying order accordingly.

**PRIMARY PATTERN ON UNDERWING** Diagnostic in all plumages. When judging this character, spacing and amount of barring important. Focus on pattern of 'fingers' and note also whether barring of primaries evenly spaced or confined to certain parts of feathers.

**SECONDARY PATTERN ON UNDERWING** Importance of this character for identification varying with age. Generally, juveniles of both species having very dark secondaries and, mostly, any pattern difficult to discern. There seems to be also considerable overlap in type of barring between juveniles of both species. Adult females, on other hand, usually easily separated on secondary pattern of underwing (and upperwing) alone.

**UNDERWING-COVERTS** Pattern important when identifying adult females; juveniles showing considerable overlap in this character.

**AXILLARIES** Important to check, especially on adults, when reasonable view of underwing impossible to get due to long distance, poor light conditions or when birds flying low over ground. Note whether armpits boldly marked or not.

**HEAD PATTERN** Since long one of the traditional field identification characters when separating ringtail Montagu's and Pallid. Reliability of head pattern increasing if bird's age known. Pay special attention to size of dark ear-coverts patch (cheeks) and its extension forwards in relation to eye and gape. Length, width and conspicuousness of pale collar in relation to ear-coverts and sides of neck also extremely important. Note also amount of white around eye and darkness of lores (face).

**FLIGHT SILHOUETTE** Often clearly different between adults, whereas juveniles may appear very similarly shaped. Note especially bulk of body (centre of gravity), proportional length of tail and proportions of wing (length of hand and arm and wing formula; cf figure 1 and 4). Usefulness of this character depending largely on observer's experience.

## Separation from Hen Harrier

When dealing with identification of ringtail har-

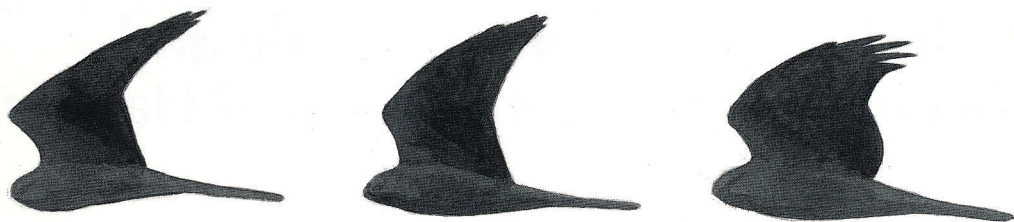


FIGURE 1 General differences in shape between, from left to right, Montagu's *Circus pygargus*, Pallid *C. macrourus* and Hen Harriers *C. cyaneus* (Dick Forsman). Note long, narrow and pointed hand and small body and long tail of Montagu's compared with more triangular-handed and heavier-bodied Pallid. Hen has broadest wings with rounded tip and bulging trailing edge to arm and rather heavy body. See text for details

FIGURE 2 Silhouettes of soaring Montagu's *Circus pygargus* / Pallid *C. macrourus* (left) and Hen Harrier *C. cyaneus* (Dick Forsman). Note differences in width of wing and structure of hand/wing-tip. In Hen, whole wing appearing equally broad with rounded tip, whereas wing in Montagu's/Pallid widest at carpal with hand tapering clearly towards tip



riers, possible confusion with Hen Harrier *C. cyaneus* cannot be overlooked. The risk of misidentification is particularly great wherever or whenever Hen Harriers occur in places where Pallid and Montagu's Harriers are more likely, eg, in northern Africa and the Middle East. Experienced birders should, as a rule, have no problems identifying the heavier Hen, with its broad and round-tipped wings. However, Hen can sometimes be truly difficult to separate from Pallid, a problem largely overlooked in the literature. The most difficult Hens are moulting adult females in late summer/early autumn, showing a pointed wing-tip. Also small and narrow-winged juvenile males, with breast streaking confined to upper breast only, can appear confusingly similar to ringtail Pallids.

Normally, Hens clearly show five fingered

primaries at the wing-tip, whereas the smaller species only show four and the wing-tip itself is formed by the longest three (cf figure 2 and plate 39). This gives Hen a typical, almost *Accipiter*-like rounded wing-tip. However, the wing-tips of moulting Hens in August-September may look untypically pointed due to one or two missing or growing fingered primaries (plate 40). Despite the untypical wing-tip, the inner hand always appears broad and the arm is broad with a curved trailing edge. The flight is also heavier and slower than in the two lighter species. Remember that many female Pallids (not Montagu's) are as heavy-bodied and actually as big as Hens, but that they still differ by their narrower and more angled and straight-lined wings. The difference in jizz and flight is important when separating difficult juvenile male Hens which sometimes

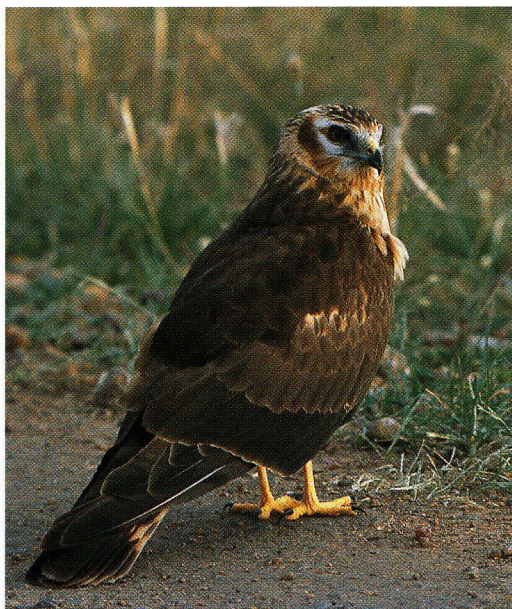




34 Hen Harrier *Circus cyaneus*, juvenile female, Finland, September 1982 (Dick Forsman). Compare with adult female Pallid Harrier in plate 38 and note especially differences in primary barring and wing formula. Pattern of darkish secondaries can be rather similar, but head appearing generally more streaked in Hen 35 Montagu's Harrier *Circus pygargus*, typical adult female, Kazakhstan, 18 September 1993 (Paul Holt). Note evenly barred primaries, typical pattern of secondaries and coarsely rufous-patterned underwing-coverts and axillaries. Note also typical head pattern and rufous bars on outer rectrices







**36** Montagu's Harrier *Circus pygargus*, adult female, Sweden, 10 August 1991 (*Dick Forsman*). Note typical, rather pale head, with large amount of white around eye and restricted dark ear-coverts spot **37** Montagu's Harrier *Circus pygargus*, juvenile, Kenya, 18 February 1987 (*Veikko Salo*). Note rather pale head with extensive white around eye, restricted dark ear-coverts patch and streaked sides of neck **38** Pallid Harrier *Circus macrourus*, adult female, Kazakhstan, 18 September 1993 (*Antti Mikala*). Note typically barred primaries and darkish secondaries. Compare also head and underwing pattern and streaking on underparts with female Montagu's in plate 35 and juvenile female Hen Harrier in plate 34





show a rather narrow hand due to the comparatively short fifth finger! Apart from the different structure and jizz, there are also plumage characters to look for. The underwing pattern of ringtail Hen is rather close to adult female Pallid, adding to the difficulty of the problem (cf plates 39 and 45). The primaries are usually heavily barred, including the fingers, but the bases may show a pale 'boomerang' like in many Pallids. Some juvenile male Hens also seem to have irregularly barred fingers, showing sometimes a very similar pattern to ringtail Pallids. The secondaries appear darkish also in juvenile Hen (plate 34), whereas adult females show distinct barring. The pattern may resemble some adult female Pallids although Hens, on average, show less dark in the secondaries than Pallids.

Perched adult female Pallids can be practically impossible to tell from adult female Hens, as the plumage can be so similar. The dark cheek-patch (ear-coverts patch) is more streaked in Hen but appears darker and more solid in Pallid. Svensson (1991) gives further characters, such as differences in colour and pattern of the underparts, spacing of the primaries on the folded wing and the relation between the trailing edge of the arm and the tips of the primary coverts on the folded wing (equal in Pallid, whereas the primary coverts fall short of the trailing edge in Hen, indicating a broader arm). Juveniles are usually easy to separate on differences in underparts alone (streaked in Hen, plain in Pallid) and on the different head-pattern. Further, the ochre patch on the upper arm is more solid and distinct in Pallid and Montagu's but blotchy and obscured in Hen. The whitish nape-patch of juvenile Pallid or Montagu's is conspicuous compared with the streaked, rather inconspicuous patch on ringtailed Hen.

### **Ageing first**

It is easier to separate ringtail Pallid and Montagu's Harriers when they are aged first. In autumn this is, normally, not difficult. Juveniles are deep tawny or ochre below with no streaking on breast (see, however, under juvenile Montagu's). They have very dark brown upperparts, with a bright ochre patch on the upperwing-coverts, and a striking head pattern. Adult females are clearly streaked below and more greyish-brown above and their head pattern is less distinct (see, however, under adult female Pallid). Spring birds are more difficult to age as many juveniles acquire breast streaking during their first winter and the upperparts become dull greyish brown due to

wear and bleaching, hence recalling adult females. The underwing pattern then remains the most diagnostic feature (see under 'Identification of first-winter-first-summer birds in spring').

### **Identification of adult females**

Identification of adult females is usually straightforward if the pattern of the underwing is seen. Apart from the underwing (primaries, secondaries and coverts, which are all diagnostic) and axillaries, which are by far the most important areas, also body streaking, upperwing pattern and general shape in flight differ between the species. The head pattern of adult females is often indistinct and may be rather difficult to assess on distant birds but, if seen well, usually is also diagnostic.

#### *Montagu's Harrier, adult female*

Adult female Montagu's Harrier (plates 35-36, 41-42) varies much less in plumage than adult female Pallid Harrier. For instance, all important characters of the underwing seem to be very constant and are therefore reliable identification features.

**PRIMARY PATTERN ON UNDERWING** Primaries barred, with even spacing from base to tip, including 'fingers'. Individual bars prominent and squarish. Trailing edge of hand with distinct dark lining merging with broad dark trailing edge of arm.

**SECONDARY PATTERN ON UNDERWING** Secondaries having same ground colour as primaries, giving whole underwing uniformly palish appearance at distance, being important feature. Secondaries typically barred: dark trailing edge separated from inner two black wing-bars by wide pale gap, similar to underwing pattern of adult male Montagu's. Importantly, this pale band distinct and wide from hand to body (cf Pallid Harrier).

**UNDERWING-COVERTS** Pale, with uniform, bold rufous markings creating contrasting 'chess-board'-pattern, continuing onto axillaries.

**AXILLARIES** Especially on low-flying birds, boldly barred 'chess-board'-patterned axillaries often providing best single character as they flash in pace with wing-beats.

**HEAD PATTERN** Quite constant, head appearing normally rather pale and poor in contrast, except for darker, isolated ear-covert patch. White around eye extensive and lores typically pale and, especially in frontal views, whole face looking whitish, giving bird open-faced and mild expression.

**UPPERWING** Remiges often appearing greyish with darker barring, especially on hand. However, second-winter and second-summer females still having darker upperwings than full adults (Forsman 1984) and especially secondaries can appear rather uniformly dark above (rest of plumage and underwing pattern



already as in full adult). Distinct dark wing-bar across clearly greyish secondaries always clear indication of adult female Montagu's (see also Pallid).

**BREAST STREAKING** Lanceolated and rather broad rufous-tinged streaks, similarly shaped and evenly spaced over whole breast.

**OUTER RECTRICES** Showing diagnostic, vividly rufous-red bars on paler sandy ground colour, as opposed to dark barring of all Pallids and juvenile Montagu's.

#### *Pallid Harrier, adult female*

Adult female Pallid (plates 38, 43-45) varies a great deal more than adult female Montagu's. Especially the head pattern and body streaking show considerable individual variation but also the important characters of the underwing are more variable than in Montagu's. This increases the risk of confusion with, especially, first-winter-first-summer Montagu's. The primary pattern is rather constant and provides the single most reliable distinguishing character. Also the secondary pattern is a distinguishing character in most adult females.

**PRIMARY PATTERN ON UNDERWING** Very different from Montagu's. Primaries often pale contrasting clearly against darker secondaries, caused by lack of distinct dark trailing edge and by heaviest barring being confined to median section of each feather. In some, individual bars narrow and 'hook-like'. Bases of primaries frequently (not always) unbarred, creating pale 'boomerang' surrounding darkish coverts, perhaps most useful single character over great distances when present. Also, distal parts of primaries usually only showing narrow, faint barring, or no barring at all, except for narrow dark 'finger tips' of longest primaries.

**SECONDARY PATTERN ON UNDERWING** Largely dark secondaries mostly contrasting sharply with paler primaries. Secondaries showing only narrow pale bars (usually narrower than dark bars), being typically wider at outer end, tapering and gradually vanishing towards body. Most common type showing underneath nearly all-black secondaries with only one pale bar across distal part of feathers. Other (old?) females showing two dark bars inside of dark trailing edge, recalling adult female Hen Harrier, but pale bars still narrower than in any adult female Montagu's.

**UNDERWING-COVERTS** Rather variable, as both ground colour and type and colour of pattern varying individually. In most individuals, lesser coverts paler with finer pattern compared with darker and more heavily patterned median and greater coverts. This creating rather contrasting pale leading edge to otherwise darkish arm, with darker coverts merging into dark secondaries. As opposite to adult female Montagu's, pattern of coverts generally difficult to discern. Coverts may be variably streaked to nearly all-brown with pale spots. Greater primary coverts often standing out as dark crescent surrounding carpal area, feature not found in adult female Montagu's.

**AXILLARIES** Armpit usually appearing darkish from distance, lacking distinct pattern. If axillaries showing any pattern, usually consisting of pale spotting on darker background, never bold and distinct barring of adult Montagu's.

**HEAD PATTERN** Very variable. Some (younger?) adults showing rather contrasting head markings, in this respect being very similar to juveniles, except for dark-spotted collar. Other (older?) females very poor in contrast, being very similar to adult female Hen, with indistinct cheek-patch and streaked crown and sides of neck. Pale neck-collar always present but often narrow and difficult to see from distance and actually very similar to that of Hen.

**39** Hen Harrier *Circus cyaneus*, adult female, Finland, 1 July 1993 (*Dick Forsman*). Note broad and rounded wings with 5 clear 'fingers' (primaries numbered ascendantly, p6 growing). Compare head, underwing and underparts with adult female Pallid Harrier in plate 38

**40** Hen Harrier *Circus cyaneus*, adult female, Finland, September 1985 (*Dick Forsman*). Note pointed wing-tip due to moult (growing inner 'fingers'), yet broad wings and heavy body (compare with Pallid Harrier in plate 45). Barring of remiges different from ringtail Pallid

**41** Montagu's Harrier *Circus pygargus*, adult female, Sweden, May 1992 (*Jens B Bruun*). Note typical barring of secondaries and primaries, coarsely rufous-patterned underwing-coverts and especially axillaries and isolated dark ear-coverts

**42** Montagu's Harrier *Circus pygargus*, adult female, Sweden, 8 August 1991 (*Dick Forsman*). Note same details as in plate 41

**43** Pallid Harrier *Circus macrourus*, adult female, Kazakhstan, 7 June 1987 (*Jyri Heino*). Note pattern of primaries and secondaries, contrast and pattern of underwing-coverts and contrast on upper breast

**44** Pallid Harrier *Circus macrourus*, adult female, Israel, April 1985 (*Markku Huhta-Koivisto*). Rather average individual. Apart from structural and plumage details, note also paler forearm, generally darker arm and paler hand and more heavily streaked upper breast. Head pattern rather similar to Hen Harrier

**45** Pallid Harrier *Circus macrourus*, adult female, Kazakhstan, 14 September 1993 (*Dick Forsman*). Note paleness and bulk as well as rather broad wings of this (moulting) adult female and compare with Hen Harrier in plate 40

**46** Montagu's Harrier *Circus pygargus*, juvenile, Kazakhstan, 8 September 1993 (*Dick Forsman*). Note typical underwing, with dark fingers and largely unbarred, greyish bases to outer primaries





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**UNDERPARTS** Variable, following coloration of underwing-coverts, both with respect to ground colour as well as to intensity of streaking. Some individuals rather deep brownish-ochre, like juvenile Hen, with bold dark streaking, while other (older?) females more whitish below with faint streaks only. Female Pallid (like Hen) tending to have more bold streaking on upper breast, whereas lower breast and belly finer streaked. This also visible in field as contrast between darker upper breast and paler belly, similar to contrast on underwing. Adult Montagu's normally showing uniformly streaked underparts with darker head only. However, beware of first-summer female Montagu's, where partial body moult frequently causing similar pattern (see below).

**UPPERWING** Mostly darker than adult Montagu's and barring of remiges more difficult to see. Often, contrast between brownish primaries and slightly darker secondaries can be seen. Normally, secondaries appearing just dark but in favourable light faint darker barring can be seen, although never with striking median bar as in adult Montagu's.

**OUTER RECTRICES** Bars of outer rectrices dark, not rufous, as in adult female Montagu's.

Distant adults may be very difficult to identify and ageing should preferably be a prerequisite to species identification (see above). Adult female Montagu's appears rather uniform, lacking contrasts, and the wings appear pale below. The chequered axillaries are often obvious over remarkable distances. Adult female Montagu's also mostly appears very small-bodied, strikingly long-tailed and long- and narrow-handed and the flight is light and graceful (figure 1). Adult female Pallid appears on average more contrasting, with darkish upperparts and paler underparts, and the underwing is clearly bi-coloured, with a dark arm and pale hand. The streaking on the underbody is heavier on the upper breast, contrasting with the clearly paler lower breast and belly. Adult female Pallid can be very similar to Hen in build, with a fuller vent, and they can

appear rather broad-winged, too. However, the wing, especially the hand, is still narrower than that of Hen and the hand is more pointed and triangular, never rounded and *Accipiter*-like (figure 2).

### Identification of juveniles

The identification of juveniles in autumn is more difficult than that of adult females. At a distance, both species appear very dark above and rich ochre or rusty below with dark secondaries and a paler hand. A positive identification requires reasonable views of the underwing, especially of the primaries, preferably supported by the head pattern. Sometimes, identification can be based on the axillaries alone. Secondary pattern and body streaking are more variable and therefore less reliable. Unlike in adult females, the flight silhouettes of juveniles do not differ notably between the species. This is especially important to remember when identifying birds in spring (see below under 'Identification of first-winter-first-summer birds in spring').

### Montagu's Harrier, juvenile

Juvenile Montagu's Harrier (plates 37, 46-47) is best identified on all-dark 'fingers', often with uniformly greyish bases to the outer primaries, and on head-pattern. After fledging, juveniles lack the extreme proportions of the adults and the flight is much less elegant. At the time of autumn migration, they normally have acquired the slim outline and the flight is more like that of adults.

**PRIMARY PATTERN ON UNDERWING** Although pattern varying more than in adults, some fairly constant characters enable identification. 'Fingers' and trailing edge of hand dark in most birds, often creating 'Buteo-like' dark lining and widely dark tip to hand, rather different from generally paler hand of Pallid Harrier. Most birds

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47 Montagu's Harrier *Circus pygargus*, juvenile, Finland, 14 August 1994 (Dick Forsman). Note typical head pattern with isolated ear-coverts patch, finely barred primaries with darkish fingers

48 Pallid Harrier *Circus macrourus*, juvenile male, Kazakhstan, 16 September 1993 (Antti Mikala). Dark cheek reaching onto lower mandible, dark lores and restricted white around eye all typical for juvenile Pallid. Note also how collar appearing to go completely around neck. Sides of neck more streaked than on average. Sexing based on pale iris

49 Pallid Harrier *Circus macrourus*, juvenile, Kazakhstan, 14 September 1993 (Dick Forsman). Primaries showing diagnostic pale bases with heavy barring confined to median part of feathers. Collar sharply defined and cheek-patch reaching onto lower mandible

50 Pallid Harrier *Circus macrourus*, juvenile, Kazakhstan, 14 September 1993 (Dick Forsman). Note diagnostic head and primary pattern

51 Pallid Harrier *Circus macrourus*, juvenile female, Kazakhstan, 16 September 1993 (Antti Mikala). Note typical pattern of primaries with pale 'boomerang', as well as diagnostic head pattern. Sexing based on dark iris



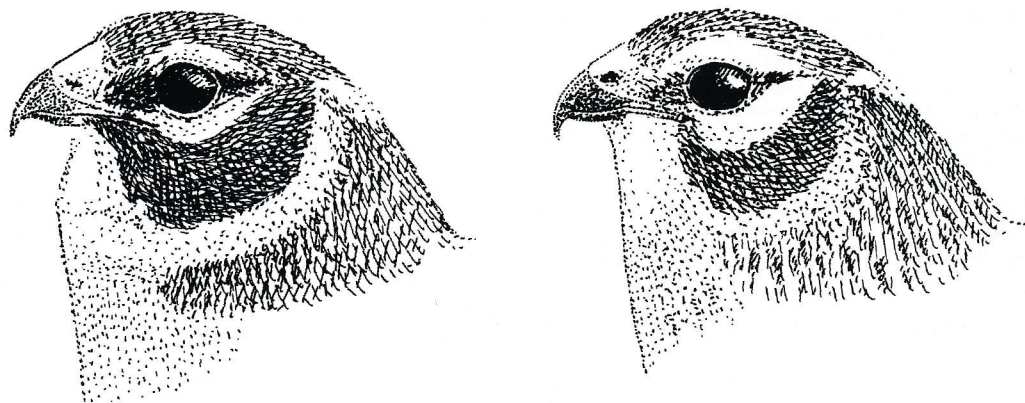


FIGURE 3 Head patterns of juveniles of Pallid *Circus macrourus* (left) and Montagu's Harrier *C pygargus* (Dick Forsman). Note especially difference in size of dark cheek-patch, amount of white around eye and distinctiveness and shape of pale collar. See text for details

showing no barring at bases of fingered primaries, as barring confined to inner four to five primaries. This adding to 'Buteo-like' effect, leaving central palm of hand paler. Small minority of birds ('barred-type') showing completely barred primaries and hence resembling Pallid in this respect. They can still be told on mostly uniformly greyish 'fingers', on regularly spaced, rather fine barring from base to tip and on darkish trailing edge to hand (cf Pallid).

**HEAD PATTERN** (figure 3, plate 37) Often quite contrasting and sometimes appearing very similar to juvenile Pallid. Montagu's generally showing more white around eye, especially above eye, and due to pale lores, eyes becoming prominent and surrounded by white. Especially in frontal views, whole face may look mostly white (appearing dark in Pallid). Dark ear-coverts patch usually not reaching further than to gape or eye, leaving widely pale throat, as opposite to juvenile Pallid (see below). Also, pale collar shorter and crescent-shaped, tapering towards both ends, not connecting across throat, as in Pallid, where collar also equally wide over entire length. Dark copper-brown birds (see below) having accordingly darker heads, with less white around eye, darker lores and more extensive ear-coverts patch, and hence may recall juvenile Pallid. Collar of these birds, however, even less distinct than in 'normal' juveniles, thus immediately excluding Pallid. Sides of neck, behind collar, mostly streaked in juvenile Montagu's but some darkish birds may show rather uniformly brown neck sides, more similar to juvenile Pallid.

**AXILLARIES** Some juveniles already showing bold axillary pattern typical for adult female Montagu's. This 'chess-board'-pattern always indication of Montagu's, whereas lack of it might indicate either species.

**SECONDARY PATTERN ON UNDERWING** Secondaries of most juvenile Montagu's dark slaty-grey and mostly too

dark to reveal any pattern in field. Secondaries generally darker and more uniformly coloured than in juvenile Pallid but variation in both darkness and spacing of barring overlapping considerably between species, offering no help to identification in most cases.

**UNDERPARTS** Juvenile Montagu's seeming more variable than juvenile Pallid, with two different colour-types. Deep copper-brown underparts probably diagnostic for Montagu's, as no similarly coloured juvenile Pallids known. Paler birds warmer in tones, more yellowish-ochre and quite similar in colour to juvenile Pallid. Important to remember, however, that underparts bleaching considerably during winter and that colour of no use when identifying spring birds. As opposed to juvenile Pallid, many Montagu's showing faintly streaked underparts. Streaking usually confined to upper breast and flanks and often conspicuous enough to be noted in field.

**UNDERWING-COVERTS** Varying from largely streaked to largely unstreaked. Often greater and median coverts streaked, while lesser coverts appearing uniform. Coverts on average more streaked in Montagu's than in Pallid, but overlap in juveniles too great to rely on this character.

**OUTER RECTRICES** Barring of outermost rectrices usually visible from below on juvenile Montagu's, whereas only dark terminal band visible on juvenile Pallid.

#### *Pallid Harrier, juvenile*

Juvenile Pallid Harrier (plates 48-51) is usually easy to identify on the diagnostic primary- and head-pattern.

**PRIMARY PATTERN ON UNDERWING** More variable than in adult Pallid but usually primaries appearing rather evenly barred from base to tip. Also, juveniles frequently showing unbarred primary bases, leaving pale



'boomerang' outside darker primary coverts, like in adult females. This character, when present, probably best single field-character, often visible at great distance, but seeming to occur less regularly in juveniles than in adult females. Greyish trailing edge of hand faint (yet darker than in adults) and fingers either evenly barred or pale with narrow dark tips only, never all-dark as in most juvenile Montagu's. Bars on average bolder and more irregular in Pallid and concentrating to median section of feathers, compared with finer and regularly spaced barring in 'barred-type' juvenile Montagu's.

**HEAD-PATTERN** (figure 3, plates 48, 51) Very diagnostic due to contrasting, distinct pale and dark areas; less variable than in juvenile Montagu's. White around eye reduced compared with juvenile Montagu's, and ear-coverts patch more extensive, mostly reaching half-way out along lower mandible. In flight, dark cheeks well visible from below, leaving only narrow pale throat compared with widely pale throat of Montagu's. Pale collar clear-cut and distinct, running equally wide all way from white nape-patch to throat. Collar often appearing to encircle head completely, as do sometimes prominent dark sides of neck bordering it from behind. Dark lores adding to contrast giving darkish face rather grim expression compared with mild-faced juvenile Montagu's.

**SECONDARY PATTERN ON UNDERWING** Secondaries appearing dark at distance, but looking often paler and, above all, more distinctly barred than average juvenile Montagu's. Many individuals showing typical adult female pattern, with one pale bar across distal part of secondaries, getting gradually narrower and darker towards body. Variation in juveniles of both species, however, too great to merit secondaries any higher status, apart from typical individuals. Secondaries should, however, not be totally overlooked, as it may provide additional support to identification.

**AXILLARIES** Usually faintly streaked or uniform, like underwing-coverts, not showing bold pattern of some juvenile Montagu's.

**UNDERPARTS** Typically unstreaked, warm yellowish-ochre. Ground colour varying only slightly and copper-brown birds not known (cf juvenile Montagu's). Underparts always appearing unstreaked in field, although some individuals may show slightly darker shafts upon close examination (in hand).

**UNDERWING-COVERTS** Generally, less streaked than in juvenile Montagu's. Streaking often limited to greater coverts, leaving median and lesser coverts unmarked. Despite average differences between species, overlap too extensive to allow separation of juveniles.

**OUTER RECTRICES** Barring of outermost rectrices usually not visible from below on juvenile Pallid, as feathers appearing plain sandy, apart from outermost tail-band showing as prominent black spot.

*Distant* juveniles are generally very difficult to identify unless the underwing is seen well. The emphasis should always be on the most reliable

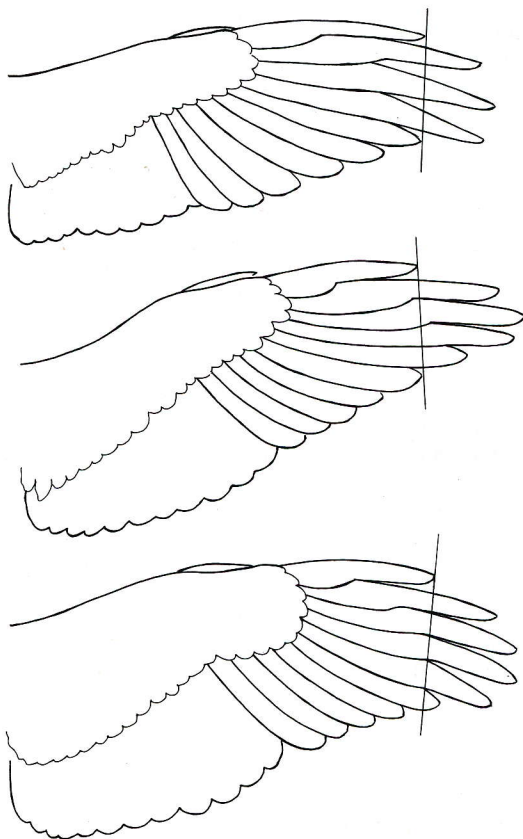


FIGURE 4 Wings of Montagu's *Circus pygargus* (upper), Pallid *C macrourus* (middle) and Hen Harrier *C cyaneus* (lower) (Dick Forsman). Note difference in wing formulas: Montagu's has long outermost primary (p1, numbered ascendantly), roughly equalling p5. In adults, tip of p5 closer to p6 than p4, in juveniles often like in Pallid. In Pallid, p1 shorter, tip falling between p5-6. P5 longer than in adult Montagu's, tip falling half-way between p4-6. Especially some juvenile Pallids and Montagu's may show rather similar wing formula. In Hen, p1-5 clearly 'fingered'. Tip of p1=p6, or falling between p6-7 and tip of p5 close to p4. Note also large hand and short arm of Montagu's compared with Pallid, and broad and rounded arm of Hen. Always take care when judging wing-formulas on moulting birds!

characters, like those of primaries and head. The secondaries provide additional characters to support the identification. Care should be taken with rare, untypical birds, like dark-headed or distinctly collared juvenile Montagu's or juvenile Montagu's with complete and evenly spaced primary barring.



### Identification of first-winter–first-summer birds in spring

The juveniles of both species undergo a partial body moult in the winter quarters, which varies between but also within species (Forsman 1984, 1993). Because of this variable moult, spring juveniles can appear in a plumage varying from a nearly fully retained (but faded and worn) juvenile plumage to an almost adult-looking plumage. Identifying spring birds becomes easier if first the bird is aged correctly. As a rule, Pallid Harrier moults less and the variation between individuals is also less than in Montagu's Harrier, where the moult is, on average, more advanced and the individual variation is extensive. The birds are most reliably aged on their juvenile remiges, which are gradually replaced during the summer (Forsman 1984, 1993). If the birds are not aged accurately before identification, there is a risk of advanced first-summer female Montagu's being misidentified as adult female Pallid, as many of the plumage characters, like head, secondaries and underparts, may appear quite similar. The underwing pattern of the primaries (often also of the coverts and axillaries) is, however, always a reliable identification feature, if seen.

#### *Montagu's Harrier, first-summer in spring*

**UNDERWING PATTERN (PRIMARIES & COVERTS)** Coverts varying individually according to extent of moult. Advanced birds may have replaced all juvenile coverts with adult-type, heavily barred feathers. At same time, retarded individuals may still retain all juvenile coverts. Juvenile remiges always retained, and hence identification should be based on them. As pattern of mostly dark secondaries overlapping between juveniles of both species, focus should be on primaries, which differ clearly between species (see under 'Identification of juveniles').

**AXILLARIES** Fortunately, nearly all birds have moulted their axillaries, showing diagnostic 'chess-board'-pattern, thus facilitating identification.

**HEAD PATTERN** Varying also in accordance with extent of body moult. Some females already showing adult-like head, whereas others having contrasting head-pattern, appearing rather similar to juvenile Pallid. In worn plumage, juveniles may even be more Pallid-like than in autumn, as wear and bleaching adding to contrasts of head (see under 'Identification of juveniles').

**UNDERPARTS** Varying from uniformly pale buff to completely streaked, according to moult. Most birds seeming to moult parts of head, and upperbreast showing clear contrast between these and retained and unstreaked juvenile feathers of lower breast and belly. At distance, this pattern, with streaked upper breast and paler lower breast and belly, rather similar to appearance of many female Pallids.

**UPPERWING** Generally rather dark and poor in contrast

and pattern. Coverts varying according to state of moult from bleached greyish-brown in retarded juveniles to darker brown with ochre covert patch in advanced, moulted birds. Secondaries always appearing uniformly dark, being darkest part of upperwing, and contrasting clearly against browner and faintly barred primaries.

**TAIL** May consist of retained juvenile rectrices, then appearing rather short. Often, however, containing few moulted, longer (often central) rectrices, adding to long-tailed image of adult Montagu's. Note also colour of barring on outer rectrices (see under juvenile and adult female).

**FLIGHT SILHOUETTE** Note that many first-summer Montagu's have not yet acquired long rectrices and remiges of adults, making their shape more compact and rather Pallid-like, compared with long-winged and long-tailed adult female Montagu's.

#### *Pallid Harrier, first-summer in spring*

**UNDERWING, HEAD AND UNDERPARTS** Generally rather similar to autumn juveniles. Body moult less extensive than in Montagu's and many birds turning up in spring in worn and bleached juvenile plumage, including head and body. Thus, first-summer Pallid hardly likely to be confused with Montagu's in any plumage. Some birds moulting head partially and many also showing necklace of streaked feathers across upper breast, but still general impression very similar to bleached autumn juvenile.

**UPPERWING** Usually showing pattern similar to retarded and unmoulted, worn first-summer Montagu's: uniformly dark secondaries contrasting with browner primaries and even paler greyish-brown coverts.

**TAIL** Similar to that of autumn juveniles.

*Distant* first-summer birds can be very difficult, if not impossible, to identify, unless important characters of underwing, axillaries and head can be seen. Again, the primary pattern of the underwing is the single most reliable feature.

### Other characters

There are several other characters that separate the two species, which, unfortunately, are of little use in the field. The emargination on the outer web of the second outermost primary falls well outside the tips of the longest upper primary coverts in Montagu's Harrier, but falls around equal with the tips of the coverts in Pallid Harrier (cf Svensson 1971, Forsman 1984, 1993). Svensson (1971) also showed that the pattern of the uppertail-coverts of adult females on average differs between the two species. Adult Montagu's tends to have streaked uppertail-coverts, whereas Pallid has barred uppertail-coverts. The juveniles of both species have whitish uppertail-coverts with a rufous wash and faint shaft-streaks in some individuals.



A possible difference in wing-formula has been brought up to discussion before (eg, Svensson 1971, Delin 1989). According to my own field experience, adults definitely have a different wing-shape, noticeable even in the field, whereas juveniles may appear very similar (figure 4). Adult Montagu's has a proportionately longer, narrower and more drawn-out hand, with the three longest primaries (p2-4, numbered ascendant) protruding as a group and p5 being proportionately shorter than in Pallid. In Pallid, the primary-tips follow each other more regularly, the wing-tip is less drawn-out and p5 is proportionately longer than in Montagu's, making the hand look fuller and the trailing edge straighter. The wing-formula can be difficult to note in the field but it is a good photo-character. In the field, Montagu's gives the impression of having a longer, more pointed and softly curved hand and a shortish arm compared with the shorter, more ample, straight-angled and shorter hand (and longer arm) of Pallid.

Though there is a size difference between the species, especially between the females, it is rarely of any use in the field. The sexes are highly size-dimorphic in Pallid, but not in Montagu's, which makes the identification of unsexed juveniles difficult. Montagu's has the lightest and most graceful flight (lowest wing-loading). Male Pallid has a rather fast, somewhat falcon-like flight, with quick wing-beats, whereas female Pallid is clearly heavier and slower and may at times appear only marginally lighter and quicker-winged than Hen Harrier.

### Identification summary

When trying to identify a suspected Pallid or Montagu's Harrier, first focus on the pattern of the underwing, especially that of the primaries, but also of the secondaries. The underwing is often easy to see and holds important characters for identification in all plumages. In side-views, the axillary pattern of adult female Montagu's is a very useful feature, as it can be seen over distances of several 100s of metres through a telescope. Head pattern can be difficult to judge on birds in flight but is of importance when seen well, and especially when perched birds are studied. The difference in flight silhouette, though existing, should only be used by experienced observers, and even then only as a tentative character. The identification is easier if the bird is aged first. When identifying adult female Pallid, one should remember that female Hen Harrier is a more likely confusion species, rather than Montagu's.

### Montagu's Harrier

Adult females usually easy to identify on their striking underwing pattern of secondaries and axillaries/wing-coverts. Also head pattern giving good indication, as variation only slight.

In juveniles, identification should be based on primary characters and head-pattern. Some juveniles also already showing diagnostic axillary pattern, typical for adults. Head and secondary characters of some juveniles can be confusingly similar to juvenile Pallid.

### Pallid Harrier

Adult females best identified on primary and secondary pattern, while underwing-coverts providing additional support. Great care should be taken to rule out possible confusion with rather similarly plumaged Hen, especially during moult in late summer and early autumn.

Juveniles quite easily identified on their underwing primary pattern and diagnostic head pattern.

Finally, the identification should always be based on not one but several identification characters – the more the merrier!

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### Samenvatting

HERKENNING VAN VROUWTJES EN JUVENIELE GRAUWE EN STEPPEKIEKENDIEF De veldherkenning van vrouwtjes en juveniele (de zogenaamde 'ringtails') Grauwe Kieken-dief *Circus pygargus* en Steppekiekendief *C. macrourus* is een klassiek probleem. In dit artikel wordt een aantal nieuwe veldkenmerken besproken. Determinatie is het eenvoudigst als de vogel eerst op leeftijd wordt ge-



bracht. In het najaar zijn juvenielen ongestreept oranje-bruin op de onderdelen en hebben een opvallende koptekening. In het voorjaar krijgen ook eerstejaars vogels gestreepte onderdelen en is de bepaling van de leeftijd moeilijker; de eerstejaars vogels zijn echter nog herkenbaar aan de oude juveniele hand- en armpennen.

Voor beide soorten en voor adulte vrouwtjes en juvenielen worden, in volgorde van belangrijkheid, de kenmerken behandeld. De belangrijkste soortkenmerken bevinden zich op de ondervleugel, met name de patronen op hand- en armpennen en dek- en okselveren. Het koppatroon is bij een vliegende vogel minder goed bruikbaar maar is van belang bij de determinatie van een zittende vogel.

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Dick Forsman, PO Box 25, 02421 Jorvas, Finland

# Herkenning en voorkomen van IJslandse Grutto in Nederland

Peter van Scheepen & Gerald J Oreel

Op 1-4 april 1989 bevond zich een mannetje IJslandse Grutto *Limosa limosa islandica* (hierna *islandica*) in adult zomerkleed in de Boscherwaard, Wijk bij Duurstede, Utrecht (waarneming 9) (van Scheepen 1989). Deze waarneming vormde voor ons de aanleiding om de herkenning en het voorkomen van *islandica* in Nederland te onderzoeken. In dit artikel bespreken wij de resultaten van het onderzoek.

De verzamelde waarnemingen van *islandica*, met inbegrip van de naar aanleiding van een verzoek in Dutch Birding (11: 185, 1989) ontvangen waarnemingen, zijn, voorzover in maart-augustus 1942-92, opgenomen in appendix 1. Hierin staan niet vermeld de waarnemingen op Wieringen, Noordholland, en in Zeeuws-Vlaanderen, Zeeland. Er zijn 51 waarnemingen (met 282 exemplaren) opgenomen in appendix 1.

Met ingang van 1 januari 1990 worden waarnemingen van *islandica* niet meer beoordeeld door de Commissie Dwaalgasten Nederlandse

Avifauna (CDNA) (van den Berg et al 1992; cf de By & CDNA 1991). Vier van de 13 in appendix 1 opgenomen waarnemingen in 1942-89 werden aanvaard (waarnemingen 1, 6, 8 en 9). De overige negen waarnemingen werden niet ter beoordeling opgestuurd. Ze zijn zodanig gedocumenteerd (waarnemingen 7, 10 en 11 bovendien fotografisch) dat redelijkerwijs niet hoeft te worden getwijfeld aan de juistheid van de determinatie.

## Herkenning (figuren 1-2)

Na bestudering van de in de literatuur gepubliceerde kenmerken en beschrijvingen van *islandica* (Salomonsen 1935, Timmermann 1949, Harrison & Harrison 1965, Glutz von Blotzheim et al 1977, Prater et al 1977, Hale 1980, Cramp & Simmons 1983, Martijn & Swennen 1984, Hayman et al 1986, Chandler 1989, Harris et al 1991, Roselaar & Gerritsen 1991, Loneragan 1992, van Beusekom 1993, Gerritsen 1994) en