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De volgorde van vogels in Dutch Birding volgt in eerste instantie een klassieke 'Wetmore-indeling'. Binnen dit raamwerk worden voor taxonomie en naamgeving de volgende overzichten aangehouden: *Zeldzame vogels van Nederland* door A B van den Berg & C A W Bosman (1999, Haarlem) (taxonomie en wetenschappelijke, Nederlandse en Engelse namen van Nederlandse vogels); *Palearctic birds* door M Beaman (1994, Stonyhurst) (Engelse namen van overige Palearctische vogels); *Vogels van de wereld – complete checklist* door M Walters (1997, Baarn) (Nederlandse namen van overige vogels van de wereld); en *Birds of the world* door C G Sibley (1996, Version 2.0, Cincinnati) (taxonomie en wetenschappelijke en Engelse namen van overige vogels van de wereld). Afwijkingen van en aanvullingen op bovenstaande overzichten zijn gebaseerd op beslissingen van de CSNA (cf Dutch Birding 19: 21-28, 1997; 20: 22-32, 1998).

Een lijst met tarieven voor de vergoeding van auteurs, fotografen en tekenaars is verkrijgbaar bij de redactie.

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Identification of red-backed, isabelline and brown shrikes

Tim Worfolk

A welcome consequence of the current high-profile debate about species (concepts and limits) is the increased attention paid to patterns of geographic variation in birds. After decades of neglect, taxa below the level of 'biological species' are no longer the preserve of specialists but have become the currency of all competent birders. This is doubtless due, in part, to numerous recent splits and the growing realization that taxonomists of the early 20th century lumped far too many taxa under the (then newly fashionable) concept of the polytypic species. An unfortunate result of this programme has been a period of neglect of geographic variation by regional field guides and even some major handbooks. The increasing use of the Phylogenetic Species Concept (PSC), more narrowly defined 'biological species' limits or simply more data, all result in the recognition of more species of birds. Probably, the greatest effect felt by birders (apart from inflated lists) will be the increased demands made on their identification skills. The '*cristatus* group' of shrikes, consisting of red-backed (the western '*collurio* group'), isabelline (the southern '*isabellinus* group') and brown shrikes (the eastern '*cristatus* sensu stricto group'), is one of the more obvious examples of this problem in the Palearctic region.

The different taxa of the '*cristatus* group' were originally described as separate species but were subsequently lumped under one polytypic species, *Lanius cristatus* (hence the group's name), a decision based more on a change in taxonomic philosophy than new data. A reappraisal of the group's taxonomy (Voous 1977, 1979) and the British Ornithologists' Union's (1980) subsequent decision to split this species into three species inevitably promoted interest among birders.

Isabelline shrikes have since proved to be of virtually annual occurrence in Britain (Dymond et al 1989) and have been recorded in most European countries. Separating (mostly first-winter) isabelline shrikes from (similarly aged) *collurio* has become 'straightforward' after excellent articles by Pearson (1981) and Dean (1982). However, distinguishing them from *collurio* is only the start because there are two isabelline shrikes, *phoenicuroides* and *isabellinus*, with the potential for vagrancy to Europe. For reasons outlined below, I consider the third taxon, *arenarius*, highly unlikely to occur in Europe.

With the proven occurrence of *cristatus* in Europe, the situation is further complicated. Separating this taxon from a dark dull isabelline shrike would certainly require care but, considering the number of birders with field experience of *cristatus*, together with its range and migratory habits (see below), its extreme rarity in Europe is somewhat puzzling (for a possible explanation of this, see Thorup 2000).

Under the PSC, three taxa each of isabelline and brown shrikes certainly warrant species rank, being geographically bounded taxa or lineages which show unique and congruent suites of character states. Under the Biological Species Concept (BSC), one could also argue that the limited or in most cases lack of evidence of hybridization between taxa justifies treatment as at least two, more or less reproductively isolated, taxa in each group, in other words, species rather than subspecies. In either case, the question of which taxa have reached Europe is no longer a minor, albeit interesting, question of subspecies but a major problem of identification. Nevertheless, while the rank of a taxon may change from species to subspecies (and back again), its appearance, as well as its ontological status, does not change. Calling it a species does not make it any easier to identify.

The *isabellinus-speculigerus* problem

As the situation is already somewhat confused, it might seem perverse to further complicate matters. However, there is a serious problem concerning the nomenclature of the isabelline shrikes and it is best tackled at the start.

As Pearson (2000) pointed out, the type specimen of *isabellinus* is actually an example of the taxon breeding in Mongolia, Transbaikal and northern China (characterized by a complete mask and blackish wings). Since Stegmann (1930), this taxon has been erroneously referred to as *speculigerus* whereas *isabellinus* has been used for the Tarim basin taxon (characterized by

an incomplete mask and brown wings). Clearly therefore, *speculigerus* is a synonym and the Mongolian taxon is hereafter referred to as *isabellinus*. A new name is also needed for the Tarim basin taxon and Pearson (2000) suggested *arenarius* (after Stresemann & Stresemann 1972).

To summarize, *isabellinus* (with a complete mask and blackish wings) breeds in Mongolia (the taxon previously known as *speculigerus*) and *arenarius* (with an incomplete mask and brown wings) breeds in the Tarim basin, China (the taxon previously known as *isabellinus*).

Methods

This article concentrates on identification only as taxonomy is best dealt with separately. In a practical sense, it is probably unimportant whether each taxon is ranked as a species or as a subspecies since individuals are identifiable with a degree of certainty, ranging from very high (adult males) to fairly high (first-winters). I am of the opinion that, not only in this case but as a general principle, it is preferable, where possible, to treat such taxa separately, whether as species, allospecies, semispecies or subspecies. In this way, information on each can be more efficiently recorded and retrieved, independently of its taxonomic ranking.

In this article, isabelline shrike refers to *isabellinus*, *phoenicuroides* and *arenarius* as a group whereas *isabellinus* refers solely to that taxon. Likewise, brown shrike means the group of *cristatus*, *lucionensis* and *superciliosus* taken as a whole. For clarity, and to avoid choosing between alternative English names (coining new ones), I prefer to use the scientific name for each taxon throughout.

The descriptions and illustrations are based on information gathered from a number of sources: field observation (of all taxa, except *arenarius* and *superciliosus*), skins (in the collections of the Chinese Academy of Sciences at Urumqi, Xinjiang, China; Muséum National d'Histoire Naturelle at Paris, France; Natural History Museum at Tring, England; and Zoological Museum of Moscow University at Moscow, Russia), photographs (both in the field and in the hand) and video-recordings.

Taxa

The taxa of the '*cristatus* group' form a natural group or superspecies (Panov 1995) although whether monophyletic in the strict sense is open to question.

Red-backed shrikes contain one taxon, *collurio*, which has traditionally been regarded as polytypic (Vaurie 1959, Rand 1960, Panow 1983), with up to five taxa. Birds of the Siberian type '*pallidifrons*' tend to be paler above and those of the type '*kobylini*' from the Caucasus and the Crimea usually show more grey and reduced and duller chestnut on the mantle. Birds of the now (sadly) extinct British type '*juxtus*' were, apart from a supposedly darker mantle, extremely similar to (if not identical with) *collurio* (Williamson 1973). Given that birds of the type '*pallidifrons*' may well represent the eastern end of a cline and that birds apparently identical with the type '*kobylini*' are not uncommon in, for example, southern Germany (Glutz von Blotzheim & Bauer 1993), the prospects for further splitting seem limited and *collurio* is here regarded as monotypic (after Stepanyan 1978, Kryukov 1950, Lefranc & Worfolk 1997).

Isabelline shrikes contain taxa characterized by a reddish tail and in adult males at least a whitish primary-patch (speculum). Traditionally, this group is most commonly divided into four taxa, discounting of course the numerous forms described from single variants or hybrids (Vaurie 1959, Rand 1960, Panow 1983, Lefranc & Worfolk 1997). Recently, Russian ornithologists have tended to split *phoenicuroides* as a monotypic species (Kryukov 1995) while lumping the remaining three. Three taxa, *phoenicuroides*, *arenarius* and *isabellinus*, are certainly identifiable and may be treated as 'phylogenetic species' (after Sangster et al 1999).

The fourth taxon, *tsaidamensis* (breeding in Qinghai, northern China; the wintering range is unknown), is usually described as similar to *arenarius* but larger and paler. However, birds breeding in the Qaidam basin, Qinghai, in June 1997 appeared identical in plumage with *isabellinus* (pers obs). Compared with *isabellinus* (with a mean male wing length of 95.9 mm), the reported large size of *tsaidamensis* (with a mean male wing length of 96.9 mm) appears to be a very weak discriminatory feature. It is possible that the persistent confusion over the type of *isabellinus* has had an effect here. An explanation would be that *tsaidamensis* was originally described as *isabellina* [sic] var *major* (Bogdanov 1881), with reference to the Mongolian population (the original *isabellinus*) and not, as recent works have implied, with reference to the pale Tarim basin population (the modern *isabellinus*, cf Pearson 2000). However, since Bogdanov's '*major*' was later corrected (due to preoccupation) to *tsaidamensis* by Stegmann (1930), who

used *isabellinus* for the Tarim basin population and *speculigerus* for the Mongolian population, the situation may be even more complicated. Until much more data from northern and western China are available, the status of *tsaidamensis*, and the intergradation of *arenarius* and *isabellinus* alluded to by Stegmann (1930), must remain conjecture.

Brown shrikes contain three (possibly four) taxa, characterized by a large-headed and long-tailed structure and a generally uniformly brownish upperside. Three taxa, *cristatus*, *lucionensis* and *superciliosus*, are traditionally regarded as belonging to this group although Stepanyan (1990) expresses doubts about the inclusion of *superciliosus.* These taxa are all well marked (diagnosable) and thus may be treated as 'phylogenetic species'. A fourth population, aptly named '*confusus*', is doubtfully diagnosable as it may represent intergradation between *cristatus* and *lucionensis*. Therefore, it may best be regarded as a synonym of *cristatus* (after Kryukov 1995).

Distribution

The different taxa of the '*cristatus* group' replace each other geographically (although with some overlap in *isabellinus* and *cristatus*) and occur in summer almost throughout the Palearctic region, from the Arctic Circle to the Tropic of Cancer (at least in the centre and east of their combined ranges). During migration and in winter, they can be seen throughout the Oriental region and also much of Africa, with the exception of the north-western and western equatorial regions. The breeding and wintering distributions of the taxa are shown in figure 1.

Collurio breeds from the Atlantic to the foothills of the Russian Altai in central Siberia. Further south, its range reaches no further east than the southern shores of the Caspian Sea (Cramp & Perrins 1993, Kryukov 1995, Panov 1995, Panow 1996). It winters in eastern and southern Africa, generally further south than *phoenicuroides* (Lefranc & Worfolk 1997).

Phoenicuroides breeds from Iran north and east to far north-western Xinjiang, through Turkmenistan, Afghanistan, western Pakistan, Uzbekistan, Tadzhikistan and southern Kazakhstan (Cheng 1987, Kryukov 1995, Panov 1995, Panow 1996). It winters mostly in southern Arabia and eastern Africa (Somalia to Tanzania) although a few are apparently found in north-western India (Ali & Ripley 1972, Pearson 1979).

Arenarius breeds only in western Xinjiang, south of the range of *isabellinus* (Cheng 1987). It winters mainly from Iran through Pakistan to north-western India. *Arenarius* is probably only a rare visitor as far west as Iraq and there appear to be no reliable records even from the Arabian peninsula (Pearson 1979). There are no records from Africa (Pearson 1979).

Isabellinus breeds from the Russian Altai through northern China and Mongolia approximately as far east as the upper Amur river (Dement'ev & Gladkov 1968, Cheng 1987). It winters from southern Arabia to eastern and central Africa, generally to the north and west of *phoenicuroides* although there is undoubtedly much overlap. Western African records of isabelline shrikes probably refer to *isabellinus* (David Pearson pers comm, contra Lefranc & Worfolk 1997). It is scarce but regular in Israel in autumn and winter (Shirihai 1996).

Cristatus breeds in eastern Siberia, from the Russian Altai and Ob river eastwards through northern and eastern Mongolia (where it is sympatric with *isabellinus*) to the Pacific (Kryukov 1995, Panov 1995, Panow 1996). The type '*confusus*' occurs in the south-eastern part of this range (in the Amur and Ussuri basins) and is the type recorded breeding in Heilongjiang and far north-eastern Inner Mongolia, China (Cheng 1987, Dement'ev & Gladkov 1968). It winters from India to Thailand and Malaysia.

Lucionensis breeds throughout most of eastern China, from Hebei and Shanxi south to Guangdong and west to Sichuan, as well as Japan (Kyushu) and Korea (Cheng 1987). It is mostly a medium-distance migrant, being found in winter as far north as southern Korea (Lefranc & Worfolk 1997). Most winter in south-eastern China, the Philippines and northern Borneo and Sulawesi, Indonesia (Lefranc & Worfolk 1997). *Lucionensis* is the brown shrike most often seen in the Andaman and Nicobar islands (Grimmett et al 1998) and is not uncommon as far west as Sri Lanka (pers obs).

Superciliosus breeds only in Sakhalin and Japan (Hokkaido to central Honshu). It winters from south-eastern Yunnan and Hainan, China, south to Indochina and the Greater Sunda islands (Sumatra east to Flores, Indonesia) (Dement'ev & Gladkov 1968, Cheng 1987, Lefranc & Worfolk 1997).

Vagrancy

The likelihood of a bird occurring as a vagrant in Europe largely depends on where it starts from, where it is normally going to, and how far it has to fly to get there. On this basis, an assessment of

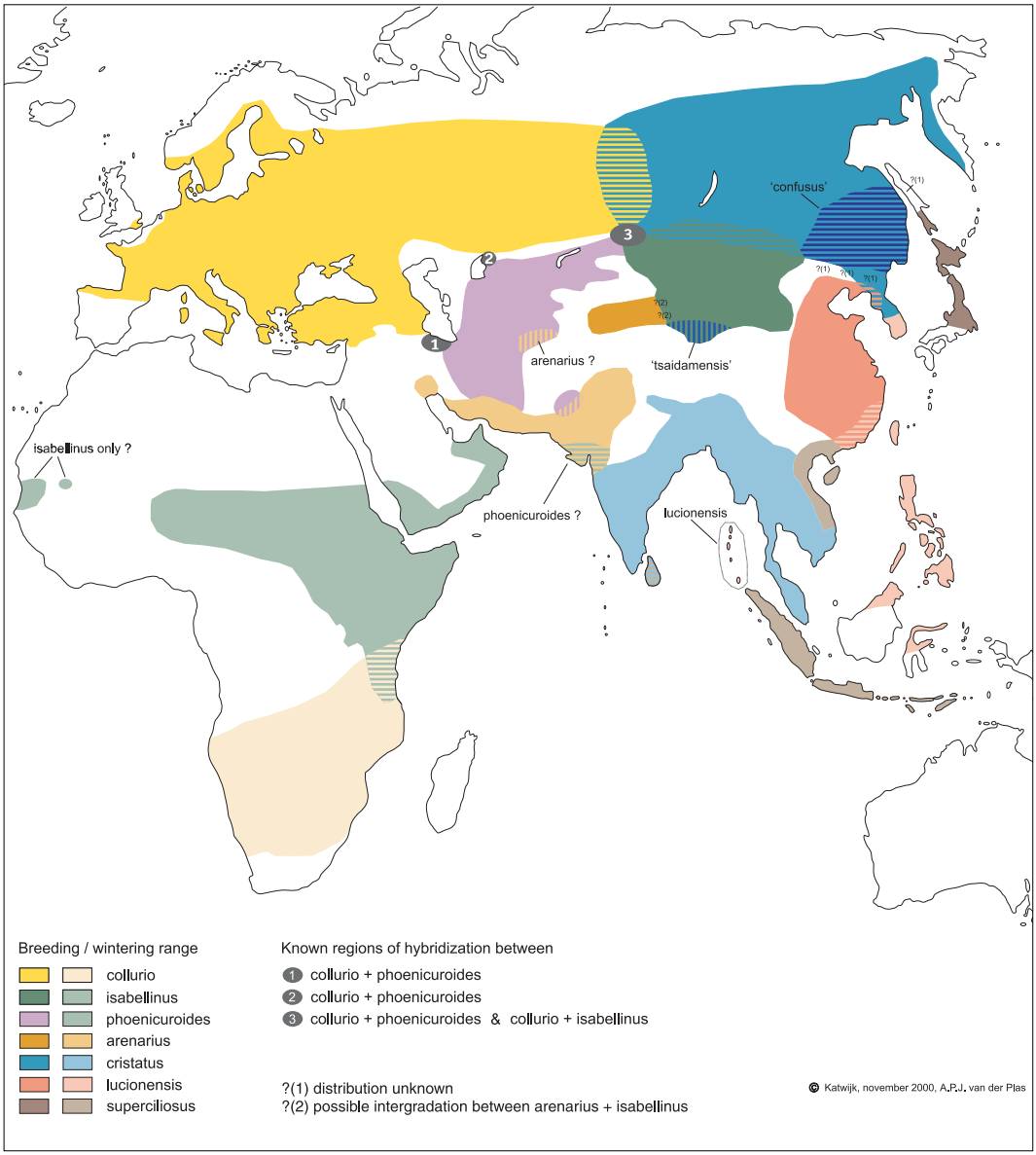


FIGURE 1 Breeding and wintering distributions of red-backed, isabelline and brown shrikes

the vagrancy potential of isabelline and brown shrikes can be attempted.

Phoenicuroides is a long-distance migrant whose range widely coincides with that of two other species recorded as vagrants to Europe, Asian Desert Warbler *Sylvia nana nana* and Blue-cheeked Bee-eater *Merops persicus persicus*. On this basis, it might be expected to be of less-than-annual occurrence.

Isabellinus breeds the furthest north-east of the isabelline shrikes and migrates the longest distance. Its breeding (though not its wintering) range roughly coincides with that of species such as Blyth's Pipit *Anthus godlewskii*, Hume's Leaf Warbler *Phylloscopus humei* and Radde's Warbler *P schwarzi*. The latter two at least are now annual vagrants to western Europe. Two wheatears, Desert *Oenanthe deserti* and Isabelline *O isabellina*, breed sympatrically with *isabellinus* in Mongolia and also migrate south-westwards in autumn. While European occurrences of these two wheatears may well involve birds originating much further west, I would not be surprised if they were related to the appearance of *isabellinus* in Europe. Contrary to earlier opinions (British Ornithologists' Union 1971, 1980, Vinicombe & Cottridge 1996, Lefranc & Worfolk 1997), *isabellinus*, on geographical grounds, would appear to be the most likely isabelline shrike to reach Europe.

Arenarius is a short-distance migrant, being reliably recorded only as far west as Iraq and as far south as the Persian Gulf (many probably wintering much further north and east in Pakistan and north-western India). On this basis, vagrancy to Europe would be unprecedented.

Cristatus is the only brown shrike which needs to be seriously considered in Europe as both *lucionensis* and *superciliosus* are found much too far east of the 'Lake Baikal watershed' (cf Vinicombe & Cottridge 1996). *Cristatus* widely shares its breeding and wintering ranges with both Richard's Pipit *A richardi* and Pallas's Leaf Warbler *P proregulus*, two of the commonest eastern vagrants. On purely geographical grounds, *cristatus* ought to be much commoner than it is in Europe (but see Thorup 2000). Extralimital records of *cristatus* are in fact few, with only three records in Europe and eight in North America (for details of these records, see appendix 1). Remarkably, an adult brown shrike recorded in Ireland in November-December 1999 showed characters of *lucionensis* (Crosher 1999).

Identification

Structure

Although all taxa in question are similar in size, slight differences in bill length and depth, wing shape and tail length combine to give each group a subtle but distinctive appearance. Relevant biometrical data, from a variety of sources, are summarized in table 1.

Brown shrikes show the longest and deepest bill, the shortest wing and the longest, narrowest and most graduated tail. This shape is at its most extreme in *superciliosus* but all three taxa have a characteristic large-headed and long-tailed appearance quite unlike *collurio* and to a lesser extent isabelline shrikes. The latter group shows considerable overlap in all measurements with *collurio* but sometimes still appears to look subtly different in shape. *Arenarius* is typically slightly shorter and blunter winged and longer tailed than *phoenicuroides* and so approaches *cristatus* in these features. *Isabellinus* is similar to (if not identical with) *phoenicuroides* in shape.

The number of exposed primary-tips, a func-

TABLE 1 Summary of relevant biometrical data of adult males of red-backed, isabelline and brown shrikes (based on Dement'ev & Gladkov 1968, Pearson 1979 and Cramp & Perrins 1993, and on own measurements from skins in collection at Natural History Museum at Tring, England). Bill length measured to skull; wing length measured as maximum chord (flattened and straightened wing) (cf Svensson 1992). Wing-tip shapes and primary emarginations in round brackets refer to less common states. Primaries numbered ascendently. –: not measured

Taxon	Bill length (mm)	Wing length (mm)	Tail length (mm)	Tail / wing ratio	Wing-tip shape	Emarginations
collurio	17-20	87-100	69-79	0.73-0.83	p3 (p4)	p3-4
phoenicuroides	18-19	91-97	74-82	0.80-0.85	p3 (p3=p4)	p3-5
isabellinus	17-20	88-98	76-83	0.80-0.85	p3 (p3=p4)	p3-5
arenarius	17-20	88-94	74-82	0.85-0.90	p4 (p3=p4)	p3-5
cristatus	19-21	84-90	77-89	0.90-1.01	p3 (p4)	p3-5
lucionensis	–	84-92	82-91	0.92-1.01	p3 (p4)	p3-5
superciliosus	–	82-91	87-93	0.99-1.03	p3 (p4)	p3-5

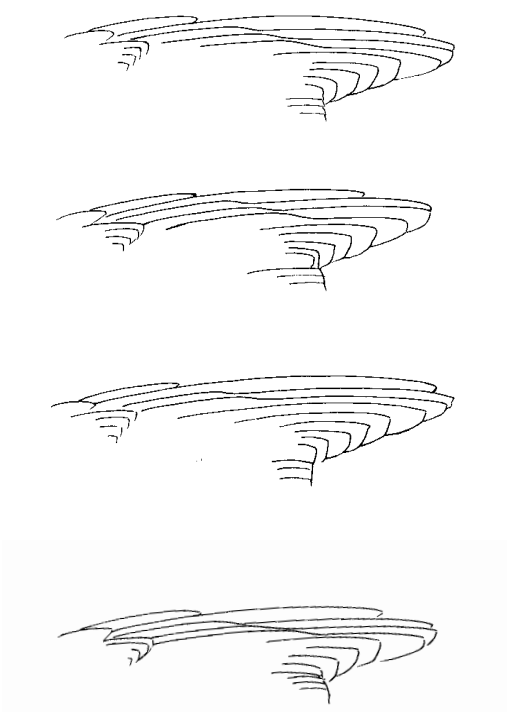
tion of both wing length and wing shape, has been proposed as a good identification feature for separating isabelline shrikes from *collurio* (Andrea Corso in manuscript 1998). This can be useful since *collurio* rarely (if ever) shows less than seven or eight exposed primary-tips whereas isabelline shrikes often show as few as six (in *phoenicuroides* and *isabellinus* p4 is usually so close to p3 in length, if not identical, that the two tips can rarely be separated in the field) or even five (*arenarius*). However, since *phoenicuroides*, which is the most similar in plumage to *collurio*, generally shows the longest primary projection, this feature may be of limited use compared with plumage differences. Primary projection is certainly more useful when comparing *collurio* with brown shrikes since the latter often show as few as four exposed primaries on the closed wing.

These differences are not reflected in either wing length (*collurio* shows almost total overlap with both *phoenicuroides* and *isabellinus*) or wing-tip shape (p3 in *collurio*, p3 or p3=4 in *phoenicuroides* and *isabellinus*; primaries numbered ascendently) and can therefore not be attributed to a shorter blunter wing in the latter two taxa. Since p4-10 are rather evenly spaced, the only remaining explanation is a difference in secondary or tertial length, with the longer secondaries and tertials of isabelline (and brown) shrikes covering the innermost primary-tips. This raises the possibility of a different flight appearance: *collurio* a rather narrow-tipped wing (and a short tail) and isabelline shrikes and to a greater extent brown shrikes a broader rounder wing (and a longer tail).

In the hand (or in good photographs), the wing formula can be used to separate *collurio* from the other taxa; only p3-4 are emarginated as opposed to p3-5 in all other taxa. However, on first-winters the emargination on p5 can be very indistinct (figure 2).

Further differences relate to the relative length of p2. In *collurio*, p2 is nearly always longer than p5 and occasionally equals p4. In *phoenicuroides*, p2 usually falls between p5 and p6, less commonly equalling p6. *Isabellinus* is very similar but perhaps more often shows p2 equalling p6. *Arenarius* usually shows a shorter p2, typically equalling p6, often between p6 and p7 but occasionally slightly longer. The brown shrikes generally show a wing formula similar to that of *arenarius* (figure 2).

FIGURE 2 Wing formulae of (from top to bottom) *isabellinus/phoenicuroides*, *arenarius*, *collurio* and *cristatus* *(Tim Worfolk)*



Sexing and ageing

In adults, sexual dimorphism is marked in *collurio*. In *superciliosus*, to take the opposite extreme, it is often practically non-existent. *Phoenicuroides* and *isabellinus* can be readily sexed in the field whereas many *arenarius* may prove extremely difficult. *Cristatus* and *lucionensis* can also be tricky and only in certain cases may a decision be made. In both taxa, an unbarred bird in fresh winter plumage can be identified as a male while a well-barred bird in fresh summer plumage is a female.

Adult females resemble males but are generally less well marked, with the exception of many *superciliosus*. The mask is paler, more brownish and fainter or even absent in front of the eye, particularly in *arenarius*. There is always at least some crescentic marking on the side of the throat, breast and flank. This is usually obvious but may be difficult to detect in female *arenarius* and *isabellinus*. The whitish primary-patch shown by all male *phoenicuroides* and *isabellinus* and most male *arenarius* is often reduced in

females and may be invisible in the field in *arenarius*. Sexual dimorphism is less marked in brown shrikes. Female *cristatus* and *lucionensis* nearly always show some dark barring on the side of the throat, breast and flank and a slightly brown (though still dark) mask. However, pair mates can look extremely similar. In *superciliosus*, the sexes are frequently practically identical. To complicate matters, many male brown shrikes apparently acquire a limited amount of female-type barring on the side of the breast during winter and frequently show a pale-based bill, thus making sexing difficult, if not impossible, at this time of year.

First-winters can usually be aged by the presence of retained juvenile tertials, greater or median wing-coverts. These are of the typical *Lanius* pattern: pale fringed with a more or less prominent dark subterminal line. However, the extent of the post-juvenile moult is variable. Many birds replace tertials and most wing-coverts, making ageing difficult. First-winter *collurio* differ from first-winters of the other taxa by the presence of extensively barring on the upperside as in juveniles. Some *phoenicuroides* and brown shrikes also show some obviously barred feathers on the upperside (whether these are retained juvenile or newly moulted feathers is not clear) but these feathers are restricted to the side of the crown, the scapulars or the rump and uppertail-coverts. Barred feathers on the upperside (most obviously on the uppertail-coverts) are occasionally shown by adults in spring and summer and occasionally as late as August. These are presumably second-calendar-year birds. The white primary-patch, once thought common to all isabelline shrikes, is absent, or at least hidden by the primary-coverts, on many first-winters and may appear as no more than a slightly paler area next to the primary-coverts.

Moult

In all taxa, there is a partial post-juvenile moult. In most, this is completed before migration but it is typically suspended during migration in brown shrikes. Whereas first-winter *collurio* look very similar to juveniles, with the upperside still being obviously barred, first-winters of the other taxa show much plainer mantle-feathers and scapulars. A complete winter (pre-breeding) moult to an adult-type plumage in late winter usually follows. However, at least first-winter *arenarius* often retain juvenile remiges and greater wing-coverts for up to a year.

The moult strategies of adults are more diverse, even within taxa, and, since moult is of very limited use in identification, only a summary is given below. Fuller details and references are available in Stresemann & Stresemann (1971, 1972), Neufeldt (1978), Cramp & Perrins (1993) and Panow (1996). There appear to be four main strategies. The lack of a winter (pre-breeding) moult in most (all?) *arenarius* and the twice-yearly renewal of remiges in brown shrikes are particularly noteworthy.

1 A partial summer (post-breeding) moult in the breeding area, followed by a complete winter (pre-breeding) moult in the winter area: *collurio*, many *phoenicuroides* and some *isabellinus*.

2 A complete summer (post-breeding) moult in the breeding area, followed by a partial (*phoenicuroides* and *isabellinus*) or no winter (pre-breeding) moult (*arenarius* only?) in the winter area: *arenarius* (some suspend wing moult during migration), some *phoenicuroides* and many *isabellinus* (also frequently suspended – or arrested? – during migration).

3 A complete summer (post-breeding) moult in the breeding area, followed by a complete winter (pre-breeding) moult in the winter area: *lucionensis*, *superciliosus* and some *cristatus* (usually completed during migration stops).

4 A complete summer (post-breeding) moult suspended during migration and completed in the winter area, followed by a complete winter (pre-breeding) moult in the winter area: some *cristatus*.

Due to the severe energetic cost of moult, it might be assumed that strategies will correlate with timing of breeding, timing and duration of migration, and perhaps also environmental conditions on both breeding and wintering grounds. In isabelline shrikes, the difference between those birds moulting before migration and those moulting after migration may be related to timing and duration of migration and/or timing of breeding. *Arenarius* breeds earlier than both *phoenicuroides* and *isabellinus* (Panow 1996) and this probably explains why it moults completely in summer rather than winter. Likewise, in brown shrikes there appears to be a correlation between the more southerly breeding birds (*lucionensis* and *superciliosus*) and a complete wing moult before migration. However, there seems to be variation within taxa (particularly in *isabellinus* but also to some extent in *phoenicuroides*) and thus moult must be considered of doubtful value in identification of adults. In any case, the most difficult birds to identify will probably be first-winters in which moult is generally rather similar in all taxa.


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General tips on identification

Adult males

Separating the majority of adult males should pose no serious problems. Typical birds are moderately to markedly distinct and form a sound basis for understanding the subtler differences between adult females and first-winters of the various taxa. The features of adult males of the three isabelline shrikes were clearly described by Pearson (1981), Dean (1982) and Svensson (1992). However, despite the accurate treatment of first-winter isabelline shrikes in, for example, Lewington et al (1991), Jonsson (1992), Olsen et al (1996) and Votier (1998), confusion persists over the appearance of adults. Some birds, however, may not be typical (*phoenicuroides* in particular is extremely variable) and the possibility of a hybrid should always be considered.

Adult females and first-winters

The differences between adult males are echoed, though less strongly, in adult females and first-winters. In the west, the main problem will be separating first-winter *phoenicuroides* and *isabellinus* whereas, in the east, separating first-winter *cristatus*, *lucionensis* and *superciliosus* will present similar difficulties. Some *cristatus* may approach darker examples of *phoenicuroides* or even *collurio* in plumage but differences in structure should be apparent.

As in other difficult-to-identify groups, there are no easily applied diagnostic characters but rather a suite of structural and plumage features which, if critically examined and with due allowance for individual variation, will usually permit a definite identification.

In Europe, identification of adult females and first-winters will be a three-step process. First, *collurio* will be considered. The extent of barring on the upperside, the tone and contrast of the crown, mantle and rump and the colour of both upper- and undertail are all fairly well-known features. An obvious pale primary-patch is strongly suggestive of isabelline shrike but its absence is of no significance. The existence of *collurio* showing a white primary-patch has long been recognized (Doherty 1983, Harrop 1990, Chylarecki 1991 who gave even earlier references) as has the feature's variable occurrence in isabelline shrikes (Dean 1982). A more or less plain upperside on first-winters (aged by the presence of juvenile tertials or wing-coverts) and a rufous- or orange-toned undertail are far more reliable features.

Second, the possibility of *cristatus* should be considered (the other brown shrikes are highly unlikely to occur in the Western Palearctic). A pallid sandy appearance with a contrastingly rufous tail will rule out *cristatus* but it should be remembered that many *phoenicuroides* are quite dark and can closely resemble *cristatus* in shade, if not tone, of upperside colour. In such cases, structural features (particularly the relative wing and tail lengths as well as the primary projection) are important.

The first two steps will in most cases take a matter of seconds, given good close views. The third step will require extremely good views, preferably several photographs and ideally a trapped bird. Once the choice is narrowed down to *phoenicuroides* or *isabellinus*, perhaps the most important features are the tone to the underside (cold and whitish or warm and often orange-buff) and the degree of contrast with the upperside. However, the differences can be somewhat subtle and prolonged views in good even light are probably essential.

In southern and eastern Eurasia, the problems of identification are similar, if reversed, to which

FIGURE 3 *(Tim Worfolk)*

1 *Isabellinus*, adult male. Weak supercilium, rich buff underside, typically has pale-based bill
2 *Isabellinus*, adult female. Weak supercilium, rich buff underside, bars typically orange-brown
3 *Phoenicuroides*, adult male. Strong supercilium, predominantly white underside, rufous crown
4 *Phoenicuroides*, adult male of type '*karelini*'. Upperside greyish, without rufous crown, underside typically pure white
5 *Phoenicuroides*, adult female. Whitish underside and strong supercilium, barring dark brown or blackish
6 *Arenarius*, adult male. Mask incomplete, remiges and wing-coverts mid-brown
7 *Arenarius*, adult female (worn). Mask very weak, remiges and wing-coverts mid-brown, no primary-patch. Underside pale-buff, very faintly barred
8 Hybrid between *phoenicuroides* and *collurio*, adult male. Very similar to *phoenicuroides* but browner upperside and, most obviously, tail pattern indicate *collurio* genes
9 Hybrid between *phoenicuroides* and *collurio*, adult male. Grey crown with weak, thin supercilium, reduced primary-patch and mostly blackish tail indicate hybrid nature


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are added the additional problems of *arenarius* in the Middle East and the Indian subcontinent and *lucionensis* and *superciliosus* from India to Indonesia.

It should not be thought that every bird can be identified. While many first-winter isabelline shrikes clearly show features of either *phoenicuroides* or *isabellinus*, a significant percentage (probably more than 10%) appears to be intermediate. These may indeed be of mixed parentage or it may be that one or both taxa are more variable than their adult plumage would suggest. Until (far) more work is done on the central Asian breeding grounds, such birds will have to remain unidentified. Identifying immature brown shrikes is equally (if not more) difficult. While I doubt that immature *superciliosus* can ever be mistaken for *lucionensis* (and vice versa), the difficulty of separating poorly marked examples of either from *cristatus* must not be underestimated.

Hybrids

Data on hybridization in the '*cristatus* group' are scarce, notwithstanding the commonly held view that 'the isabelline shrikes all intergrade somewhere in central Asia'. The only instances of extensive hybridization reported are between *collurio* and *phoenicuroides* and between *collurio* and *isabellinus* (Stegmann 1930, Mauersberger & Portenko 1971, Kryukov 1995, Panov 1995, Panow 1996, Lefranc & Worfolk 1997). The situation is extremely complicated and open to differing interpretations. While it is beyond the scope of this article to go into any detail, a few tips may be usefully made.

1 Birds, particularly adult males, showing clearly mixed characters of both *collurio* and *phoenicuroides* or *isabellinus* are well known, though apparently uncommon, and should be easily identifiable as such. Pearson (1979) described six such hybrids (five males and a probable hybrid female) from eastern Africa. The males resembled male *collurio*, except for a duller earth-brown mantle, rump and uppertail-coverts mixed with reddish and grey feathers and a dark brown or blackish tail with reddish-brown edges. An adult male (presumably a hybrid between *collurio* and *phoenicuroides*) from Kenya (present in the skin collection at Muséum National d'Histoire Naturelle at Paris) examined by me showed a tail pattern very like that of *collurio* but with the bases of the outer rectrices pale buff rather than white and a grey-brown rump (otherwise it was identical with many *phoenicuroides* of the type '*karelini*'). In most of the hybrid males held at the Zoological Museum of Moscow University at Moscow, the tail pattern provides the most obvious evidence, typically showing dark brown or blackish marks to otherwise rufous rectrices. Two examples of adult male hybrids are illustrated in figure 3.

2 Phoenicuroides of the pale grey type '*karelini*' are regarded by some authors (Stegmann 1930, Kruykov 1995, Panov 1995, Panow 1996) as being hybrids (between *collurio* and *phoenicuroides*). While this is perhaps supported by the grey crown and, albeit weakly, by certain wing measurements of the type '*karelini*' (lengths of p1-2), these birds are certainly phenotypically closer to *phoenicuroides* (a series of graded intermediates can be readily assembled from skins in the collection at the Natural History Museum at Tring) than to *collurio*. For the present, I prefer to follow Cramp & Perrins (1993) and treat them as colour morphs of *phoenicuroides*.

3 Kryukov & Panov (1980) alluded to the possibility of hybridization between *phoenicuroides* and *arenarius* and between *arenarius* and *isabellinus* (see also Stegmann 1930), based on apparently intermediate specimens and observa-

FIGURE 4 *(Tim Worfolk)*

1 *Cristatus*, adult male. Deep rich brown upperside, obvious broad supercilium
2 *Cristatus*, adult male, paler (worn?) late-winter bird. As above; pale bill base not uncommon in winter males
3 *Cristatus*, adult female. As male but shows strong underside barring (weak barring can be shown by winter males)
4 Presumed intergrade between *cristatus* and *lucionensis*, adult male. Birds showing intermediate characters (often termed '*confusus*') are not uncommon
5 *Lucionensis*, adult male. Grey crown, grey-brown mantle and weak (or non-existent) supercilium
6 *Lucionensis*, adult female. As male but shows strong underside barring (weak barring can be shown by winter males)
7 *Superciliosus*, adult male. Rich bright rufous upperside
8 *Superciliosus*, adult female. Very similar to male, many are even less barred than this
9 *Superciliosus*, female, presumed second calendar-year. Incomplete mask and barring on side of crown indicate immaturity


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tions of attempts to form mixed pairs. However, since *arenarius* and *phoenicuroides* are allopatric (with the possible exception of a small area in the Chinese Tien Shan) and since *arenarius* arrives in the breeding area up to a month earlier than *phoenicuroides*, the chance of mixed-pair formation must be slight. Since *arenarius* appears to be parapatric with *isabellinus* across much of central Xinjiang, the possibility of hybridization (or even extensive intergradation) between these two taxa must be higher. Whether or not *phoenicuroides* and *isabellinus* hybridize is unknown. Their breeding ranges certainly appear to meet in northern Xinjiang although only marginally.

4 Collurio overlaps fairly widely with *cristatus* but only two hybrids are known (Kryukov 1995). *Cristatus* is also widely sympatric with *isabellinus* in eastern Mongolia but hybridization is unrecorded.

5 Hybridization between brown shrikes is also poorly known. However, the type '*confusus*' may represent the introgression of *lucionensis* genes into *cristatus* and a number of *lucionensis* specimens examined show a browner crown than is typical. The possibility that the two taxa intergrade where their ranges meet in northern Heilongjiang needs further research. *Superciliosus* is an island taxon and largely allopatric. Possibly, the type '*confusus*' occurs in northern Sakhalin (Lefranc & Worfolk 1997, cf Dement'ev & Gladkov 1968) where it may come into contact with *superciliosus* but any interbreeding is unreported. There is, however, a record of *superciliosus* breeding with an extralimital *lucionensis* in Japan (Ishizuka 1990).

Hybrids seem to be rare in skin collections and so must be assumed to be rare in the field. The temptation should be resisted to label a 'difficult bird' a hybrid if a definite identification can not be achieved.

Descriptions

As in most identification problems, correct ageing and to a large extent sexing are a vital first step. *Therefore, in the descriptions generally only plumages of the same age and sex are compared.* For example, first-winters are only compared with other first-winters and not with adult males or females. Birds that can not be aged or sexed in the field should, for the purposes of identification, be regarded as adult females because such birds resemble adult females most (although they may actually be first-winters). Rather than repetitively listing the appearance of every plumage tract, I have concentrated on those areas of use in identification. Thus if a feature is not described, it should be assumed that it is not known to differ from its most similar confusion taxa. Diagnostic characters are few but, if known, these are given first, together with the general appearance, often equally useful with experience, and the most reliable supporting characters.

Although it may seem unnecessary to those who encounter *collurio* on a regular basis, this taxon is dealt with in the same manner as the other taxa. This is partly for completeness but mainly because the extent of variation in adult females and first-winters is perhaps not fully appreciated.

Collurio

Structure

Collurio is long winged and short tailed. The primary projection is long, with typically eight primary-tips visible on the closed wing. The bill is not particularly long or deep.

Adult male

Although there is some variation in the amount of chestnut on the mantle, the combination of a

FIGURE 5 *(Tim Worfolk)*

1 *Phoenicuroides*, first-winter. Whitish underside, strongly barred. Plain grey-brown mantle, prominent barring on crown

2 *Phoenicuroides*, first-winter. Greyer bird with no rufous on crown (female?)

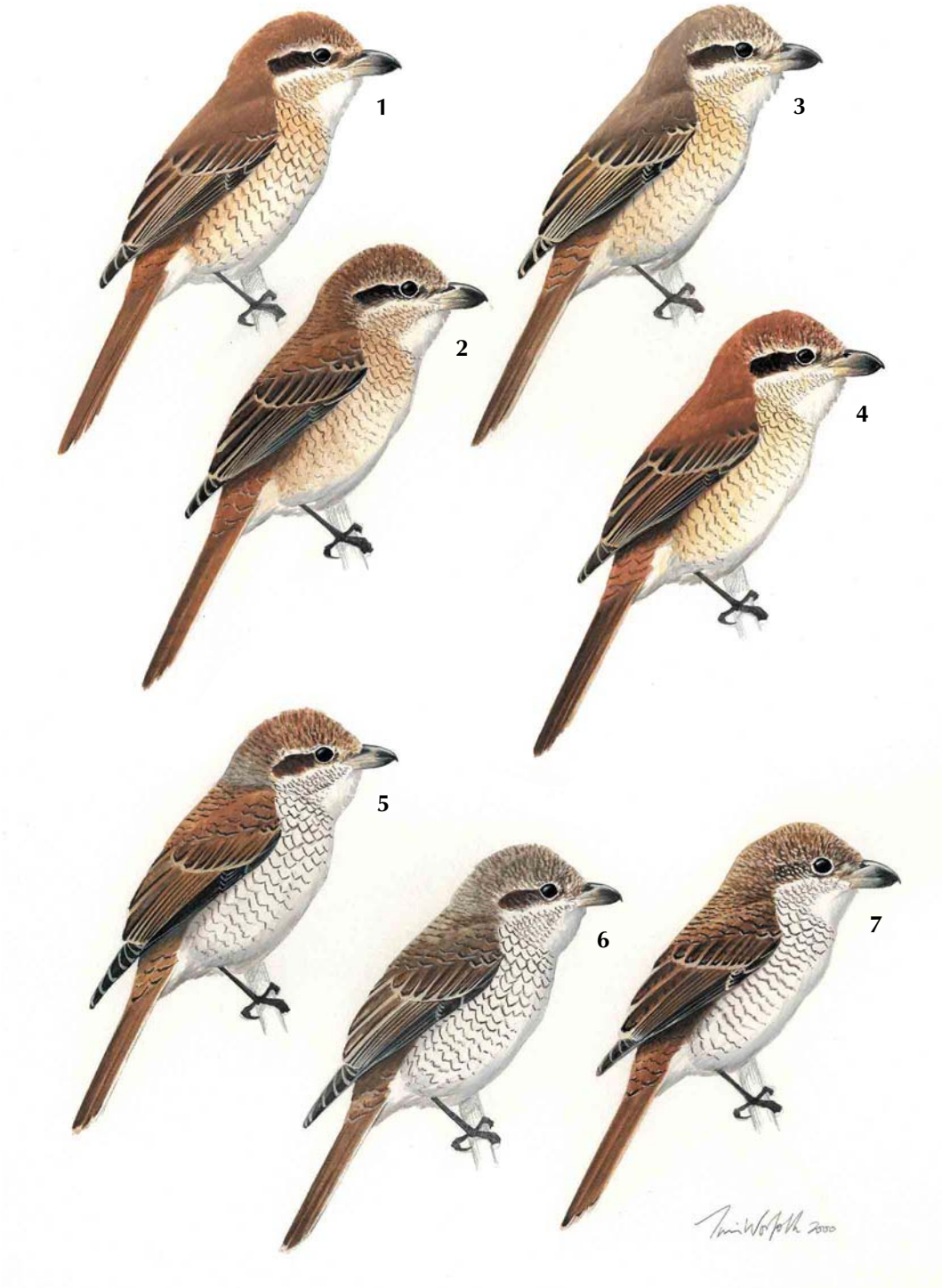
3 *Phoenicuroides*, juvenile/first-winter. Some individuals can be extensively barred above as late as mid-September

4 *Isabellinus*, first-winter. Well-marked individual. Underside extensively washed buff, supercilium weak, upperside usually paler sandy grey-brown contrasting weakly with underside. Barring may be as dark as in *phoenicuroides*

5 *Isabellinus*, first-winter. Poorly marked individual. Underside barring faint and orange-brown. Remiges dark brown or blackish (cf *arenarius*)

6 *Arenarius*, first-winter. Very pale and weakly marked, remiges mid-brown. Tail pale and never darkening distally Probably never shows pale primary-patch

7 *Collurio*, first-winter, pale individual. Obviously barred above and with greyish-toned nape (and rump)


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grey crown, nape and rump with a chestnut mantle and the black-and-white tail are distinctive and diagnostic. A minority of males (and females) show a small whitish spot at the base of the primaries. It is unclear whether this is the result of introgression of *phoenicuroides* genes as the feature has been noted in birds in Europe, several 1000 km from the nearest breeding *phoenicuroides* (Chylarecki 1991).

Adult female
Apart from structure, the best features are the greyish nape and rump contrasting with the warmer brown mantle (this contrast is typically reversed in isabelline shrikes), together with the whitish underside and usually heavy dark barring. The uppertail may be warm brown or even rufous but the undertail is always greyish and the outer rectrices are distinctly paler or even white on the outer web.

Females of the other taxa are more uniform above than *collurio* with, if anything, a warmer-toned rather than greyer crown. The only exception is female *lucionensis* which, alone among eastern birds, show a distinctly paler greyer crown. In *collurio*, the crescentic barring on the side of the throat, breast and flank is much bolder (darker and broader) than on all but a minority of female *phoenicuroides* although many *cristatus* show a similar pattern. A small number of female *isabellinus* (probably less than 10%) show a moderately well-barred underside but this is always combined with a much warmer buff or even pale orange ground colour. Female *arenarius* never show anything more than faint barring.

A proportion of females show a male-type plumage. In these birds, the crown and nape and the rump and uppertail-coverts are bluish-grey, the mantle is dull chestnut and the tail is typically dark blackish-brown with distinct whitish edges. However, such birds can be easily sexed by the pale lore and forehead and the presence of barring on the underside. It has been suggested that this plumage is typical of older females but evidence for this seems to be lacking.

The bill is usually dark grey, with a pale (often pinkish) area at the base. It is typically darker than in isabelline shrikes but there is some overlap.

First-winter
First-winters are more heavily barred above than the other taxa. The undertail is always greyish and the outermost rectrices show a whitish fringe. These features, together with the distinctive long-winged and short-tailed structure, are diagnostic.

Some *phoenicuroides* appear to retain some barred juvenile feathers and many *cristatus* suspend moult during migration but in *phoenicuroides* the dark bars are generally narrower and finer and in both are mixed with at least some plain first-winter mantle-feathers and scapulars.

The tone to the upperside (including the tail) varies considerably, from rufous to greyish and from dark to pale. Rufous-toned birds can be confused with more saturated examples of first-winter *phoenicuroides* but they typically show a contrastingly greyer rump and nape never shown by the other taxa. The ear-coverts are usually dark rich chestnut. The supercilium is often poorly marked but may be quite obvious on some. The lore often shows a pale crescent immediately in front of the eye, a feature shown by many isabelline shrikes but rarely (if at all) by brown shrikes. The tertials and wing-coverts are usually rich rufous in the centre, with a blackish 'juvenile line' when unmoulted. The underside is usually off-white, lacking buff tones, and heavily marked with dark brown or even blackish crescentic bars.

Phoenicuroides

Structure
Although there is considerable overlap in measurements, *phoenicuroides* usually appears short-

FIGURE 6 *(Tim Worfolk)*
1 *Cristatus*, first-winter. Rich brown upperside, barring retained on crown and uppertail-coverts only
2 *Cristatus*, juvenile/first-winter. Many individuals on migration (September at least) still in largely juvenile plumage
3 *Lucionensis*, first-winter. Duller and more grey-brown upperside than *cristatus* (although many inseparable)
4 *Superciliosus*, first-winter. Note strongly rufous upperside
5 *Collurio*, first-winter, rufous individual. Prominent upperside barring with greyer nape (and rump). Note structural differences
6 *Collurio*, first-winter, grey individual
7 *Tigrinus*, first-winter (see p 353). Large deep bill, weak head pattern (eye-ring usually more obvious than mask or supercilium). Extensively barred above (typically including tertials and greater wing-coverts)



319 *Collurio*, female, Jubayl, Saudi Arabia, 12 April 1991 *(Arnoud B van den Berg)*. Typical female with grey nape, rump and uppertail-coverts, and dark brown tail with white edges and tip

320 *Collurio*, female, Kuwait, spring of 1997 *(Nigel Cleere)*. Male-type female with grey crown and nape and blackish tail. Easily sexed by presence of dark crescentic barring on underside and incomplete mask





321 *Collurio*, juvenile, Eilat, Israel, 28 September 1992 *(Leo J R Boon/Cursorius)*

322 *Collurio*, juvenile, Öland, Sweden, September 1996 *(Theo Roersma)*



er winged and longer tailed than *collurio*. The slightly longer tail can be rather more obvious than measurements would suggest since *phoenicuroides* (like the other isabelline shrikes) appears to raise the tail, or even waves it from side to side, more frequently than *collurio* does. The primary projection averages also shorter, with typically only six or seven primary-tips visible on the closed wing.

Adult male

The striking head pattern, with a prominent whitish supercilium and throat, gives a quite different appearance compared with the other isabelline shrikes. A solid black lore, a blackish wing contrasting with a greyish- or grey-brown mantle and a dark rufous (not pallid cinnamon) tail are good distinctions from *arenarius* while male *isabellinus* are more obviously creamy-buff on the throat and supercilium and often quite orange toned on the flank. The rich rufous crown contrasting with the duller brown mantle of most birds is also diagnostic.

The rump, uppertail-coverts and tail are always contrastingly bright rufous, the tail typically becoming deeper coloured or even chestnut towards the tip. The rest of the upperside is however somewhat variable. In 'classic birds', the crown is bright ginger or rufous, gradually becoming duller greyish-brown on the nape and mantle. In many birds (of the type '*karelini*'), the upperside (including the crown) is much greyer and often paler (otherwise they are apparently identical); all stages of intermediates occur. An unknown proportion of such pale birds show a whitish forehead and lore, with only a small blackish spot in front of the eye (otherwise they are as typical males). It is not known if this is age related. The wing (including the tertials and wing-coverts) is blackish when fresh, with a fairly broad and paler (ginger-rufous to pale buff) fringe to the feathers. The bases of the primaries are extensively white, forming an obvious patch on the closed wing.

The underside is whitish (particularly on the throat and undertail-coverts), with at most a pale salmon or pinkish-buff wash to the breast and flank, thus appearing much paler below than in *isabellinus*.

The bill is usually all-black although some

323 *Phoenicuroides*, adult male, United Arab Emirates, March 1998 *(Steve Young/Birdwatch)*. Typical male with rufous crown, prominent white supercilium and even in fresh plumage very white underside. Also note uniformly dark bill and strikingly rufous undertail





324 *Phoenicuroides*, adult male, Kuwait, spring of 1997 *(Nigel Cleere)*. Similar features in bird in plate 323 although slightly duller crown

325 *Phoenicuroides,* adult male, Jubayl, Saudi Arabia, 17 April 1991 *(Arnoud B van den Berg)*. Very greyish upperside, with only faint tinge of rufous on crown, and almost pure white underside are indicative of type '*karelini*'





326-327 Probable *phoenicuroides*, adult male, Texel, Noord-Holland, Netherlands, 2 October 2000 *(René Pop)*. Even well-photographed adults deserve caution. Supercilium and ear-coverts appear white and contrasting, indicating *phoenicuroides*. Supercilium and underside look too pale and contrasting for anything but *phoenicuroides* but pale bill base could indicate intermediate between *isabellinus* and *phoenicuroides*



birds show a pinkish-grey area at the base of the lower mandible.

Adult female
Plumage tones (including their variation) are similar to those of males. Dark brown or blackish remiges and wing-coverts, combined with a rather whitish (not rich buff) underside and supercilium, are the best characters for separating female *phoenicuroides* from females of the other two isabelline shrikes.

The upperside varies from dark greyish-brown to a considerably paler sandy-grey (presumably females of the type '*karelini*'). However, all birds show at least a slightly warmer tone to the crown as well as a rufous rump contrasting with the more drab mantle (the reverse to that found in *collurio*). Compared with the uniform warm-toned appearance of *isabellinus* and *arenarius*, female *phoenicuroides* show a fairly obvious contrast between the drab (often quite grey) mantle and the cold whitish underside. As in males, the head pattern is typically better marked than in the other isabelline shrikes due to the combination of the whiter and often broader supercilium, the more uniformly dark ear-coverts (not showing the rufous tone found in many *collurio*) and the darker rufous-toned crown. The underside is whitish as in males (and in female *collurio*), with at most a faint pink-buff wash to the breast and flank. There is always some dark brown crescentic barring on the side of the throat, breast and flank. On some birds, this may be faint but on others the bars may be quite broad and approach those of *collurio* in appearance.

The uppertail may look rather dull but the undertail always shows a rufous or even orange tinge (unlike in *collurio*) and the outer rectrices never show a whitish outer web although their tip may be obviously pale fringed. A white primary-patch is always present but may be hidden by the primary-coverts and invisible in the field.

The bill is usually pale pinkish, only becoming darker and greyer at the tip. Female *collurio* typically show a darker bill but this is matched by many *phoenicuroides*.

First-winter
First-winters are very similar to adult females and much the same features apply in identification. The earth-brown to pale sandy-grey upperside contrasting with the predominantly whitish underside is the most useful distinction from *isabellinus* and *arenarius*.

Most *phoenicuroides* are dull earth-brown above, darker than *isabellinus* and *arenarius* and duller than *collurio*. A few are quite pale however (presumably of the type '*karelini*'). Paler birds may be identified by the greyish tone to the upperside and the whitish (not orange-buff) underside. Most (if not all) birds on migration in autumn show visible barring on the crown and uppertail-coverts and many show retained juvenile feathers on the mantle. While this is never as obvious or extensive as in *collurio*, the risk of confusion is real.

As in adult females, the head usually shows a more obvious whiter supercilium and darker ear-covert patch than in the other isabelline shrikes. The ear-coverts appear to be never as rufous as is typical in *collurio*. The underside is as in adult females; the overall tone is whitish, with a variable degree of dark brown (rather than orange-rufous) barring. This can be quite obvious and thus similar to that in *collurio*. At least some *isabellinus* also show quite dark crescents although such well-marked birds typically show a correspondingly saturated orange-buff wash to the side of the throat, breast and flank.

On many *phoenicuroides*, most or even all juvenile tertials and wing-coverts are replaced before migration and these birds are thus very difficult, if not impossible, to age in the field. There are probably always a few barred feathers visible however, often on the side of the crown, rear-scapulars and uppertail-coverts. These are typically better marked than in *isabellinus* and *arenarius* and thus not only permit ageing but can also be of use in identification. The juvenile tertials and greater wing-coverts are darker centred than in *arenarius* and usually to a lesser extent *isabellinus* and rather less rufous toned than in *collurio*. The reverse is typically the case in the median wing-coverts where first-winter *phoenicuroides* often have quite whitish feather-centres (warmer buff in *isabellinus* and *arenarius* and rufous in *collurio*). The 'juvenile lines' are often darker or broader and more obvious than in the other isabelline shrikes.

The bill is typically more extensively pale grey-pink than in *collurio* and similar to that of adult females.

Isabellinus

Structure
While there appear to be slight mean differences in wing formula, with *isabellinus* more frequently showing a shorter p2, in general this taxon appears identical in shape with *phoenicuroides*.



328 *Phoenicuroides*, male, possibly second calendar-year, Kuwait, spring of 1997 *(Nigel Cleere)*. Sexed in hand as male; apparent total lack of any barring on underside supports this. Mask, although blackish, is incomplete. This may be result of moult but is more likely to be age related; faint scaling on forecrown suggests immaturity

329 *Phoenicuroides*, female, Jubayl, Saudi Arabia, 9 April 1991 *(Arnoud B van den Berg)*. Rather poorly marked below but faint crescentic barring visible on ear-coverts and upperbreast. Faint subterminal lines to uppertail-coverts and forecrown suggest that this may be second-calendar-year bird. Note prominent whitish supercilium and white (not buff) underside contrasting with dark grey-brown upperside





330 *Phoenicuroides*, female, Cemlyn Bay, Anglesey, Wales, July 1998 *(Steve Young/Birdwatch)*. Whitish underside and rather pale cold greyish upperside strongly suggest type '*karelini*'. Fresh remiges (for example, innermost secondary) are blackish and thus definitely rule out *arenarius* while *isabellinus* is warmer toned both above and below. Although clearly first-summer or older, there is nothing visible to permit more precise ageing. Extensive (although faint) barring on underside strongly suggests female, as does incomplete mask (but see plate 328)
331 Probable *phoenicuroides*, first-winter, Salalah, Oman, October *(Hanne & Jens Eriksen)*. Not most well-marked of *phoenicuroides* but still whitish below, particularly on flank. Note also lack of any visible white primary-patch and moderately obvious barring on crown





332 *Isabellinus*, adult male, Turpan, Xinjiang, China, 17 September 1998 *(Paul J Leader)*. Features as in bird in plate 331. Note very weak supercilium

Adult male

While sharing many features with *phoenicuroides* – a complete black mask, reddish tail and pale primary-patch – male *isabellinus* are sufficiently distinctive to be easily identified in the field. Their very uniform appearance, due to the sandier upperside and the much warmer-toned buffer underside, is perhaps the most immediately striking difference.

The upperside is a rather nondescript sandy grey-brown (the colour traditionally referred to as 'isabelline'). The crown is often a little warmer in tone, sometimes appearing quite ginger but never dark rufous as in many *phoenicuroides* and the contrast with the mantle is always slight. The mask is blackish, reaching to the bill as in *phoenicuroides*, but typically narrower, rarely fully surrounding the eye or meeting over the bill. The supercilium is narrow and buff in colour, thus contrasting poorly with the crown.

The underside is warm buffish throughout, never showing the contrastingly white throat as in *phoenicuroides* although in some birds the throat is paler than the breast and appears to contrast more due to hunched posture. The intensity of colour varies individually, as well as through wear, and fresh individuals may appear quite orange on the side of the throat, breast and flank.

The wing (including the tertials) as well as the rump and tail are as in *phoenicuroides*, thus darker than in *arenarius*. Due to the paler mantle, the blackish wing of *isabellinus* contrasts more than in most *phoenicuroides*. The primary-patch is typically as obvious as in *phoenicuroides* but often buff-white rather than pure white.

The bill is rarely (never?) entirely black but at close range it appears steely-grey, usually with a slight pinkish tinge proximally, thus breaking the black line from bill-tip to ear-coverts shown by most *phoenicuroides*.

Adult female

Females resemble males in their sandy grey-brown upperside and warm buff underside, giving a uniform appearance quite different from *phoenicuroides*. The dark wing and the rich rufous rump and tail, though not as pronounced as in males, are useful in distinguishing female *isabellinus* from similar (though paler) *arenarius*.

Pale birds may need prolonged close views in good light to detect the warm buff-toned supercilium and ear-coverts which are the safest distinctions from similarly pale *phoenicuroides*. The ear-coverts are darker than in *arenarius* and there



333 *Isabellinus*, adult male, Kuwait, spring of 1997 *(Nigel Cleere)*. Note pale sandy upperside contrasting very little with warm buff underside, especially supercilium and throat. Complete black mask and blackish wing eliminate *arenarius*. Note that bill is not all-black but pink-grey at base **334** Probable *isabellinus*, adult, United Arab Emirates, 7 March 1999 *(Nils van Duivendijk)*. This bird can be tentatively identified as *isabellinus* because of buff (not white) throat. Blackish remiges and dark rufous tail rule out *arenarius*. However, mantle appears rather dark and underside is paler than normal, so perhaps *phoenicuroides* can not be safely excluded **335** *Isabellinus*, adult, Sohar, Oman, March *(Hanne & Jens Eriksen)*. Warm-toned underside typical. Dark remiges and deep rufous tail rule out *arenarius*. Almost certainly female: pale lore and extensive pale bill-base although no barring on underside visible









336 *Isabellinus*, adult female, Tarut, Saudi Arabia, 9 April 1991 *(Arnoud B van den Berg)*. Very similar to bird in plate 334 although possibly even paler above **337** *Isabellinus*, first-winter, Xinjiang, China, 21 September 1998 *(Geoff Carey)*. Note uniform appearance due to rather dirty-looking buff underside **338** *Isabellinus*, first-winter, Stocks Reservoir, Lancashire, England, November 1996 *(Steve Young/Birdwatch)*. Rather pale and poorly marked compared with bird in plate 339. Although throat and ear-coverts appear rather pale, very faintly barred orange-buff breast and flank are never shown by first-winter *phoenicuroides*. Slightly warmer crown, obviously rufous (not pale cinnamon) and distally darkened tail, together with moderately dark remiges, all rule out *arenarius*







339 *Isabellinus*, first-winter, Xinjiang, China, 17 September 1998 *(Paul J Leader)*. Well-marked bird, with dark barring on underside and obvious supercilium. However, ear-coverts and flank are obviously quite deep buff. There is no visible primary-patch **340** *Isabellinus*, first-winter, Xinjiang, China, 20 September 1998 *(Geoff Carey)*. This bird is rather paler on flank than is typical. However, ear-coverts are buff rather than whitish, upperside is more sandy-brown than grey and there is no obvious supercilium. Distal darkening of tail, while not always shown, rules out *arenarius* as do blackish primaries

is always at least some white at the base of the primaries, rarely (if ever) present in *arenarius*.

First-winter

As with adults, the best starting tip in identification is the overall tone of the bird. However, first-winters are most similar to *phoenicuroides* and *arenarius* and it may be that some individuals will remain unidentifiable even under optimal conditions.

First-winter *isabellinus* differ from *phoenicuroides* most obviously in their paler (more uniform and sandy-brown) appearance, lacking the contrast between the greyish mantle and the whitish underside shown by first-winter *phoenicuroides*. However, some *phoenicuroides* can appear slightly buff on the flank, so this feature needs to be used with care. The key areas are the supercilium and the ear-coverts and the side of the throat. These are usually uniformly buff or even pale orange in *isabellinus* but a cleaner white in *phoenicuroides*. The ear-covert patch is usually pale brown and generally warmer in tone than in *phoenicuroides* but more obvious than the indistinct mark shown by first-winter *arenarius*. In combination, these features often produce a rather pale and plain face pattern with a weak supercilium and mask compared with *phoenicuroides*.

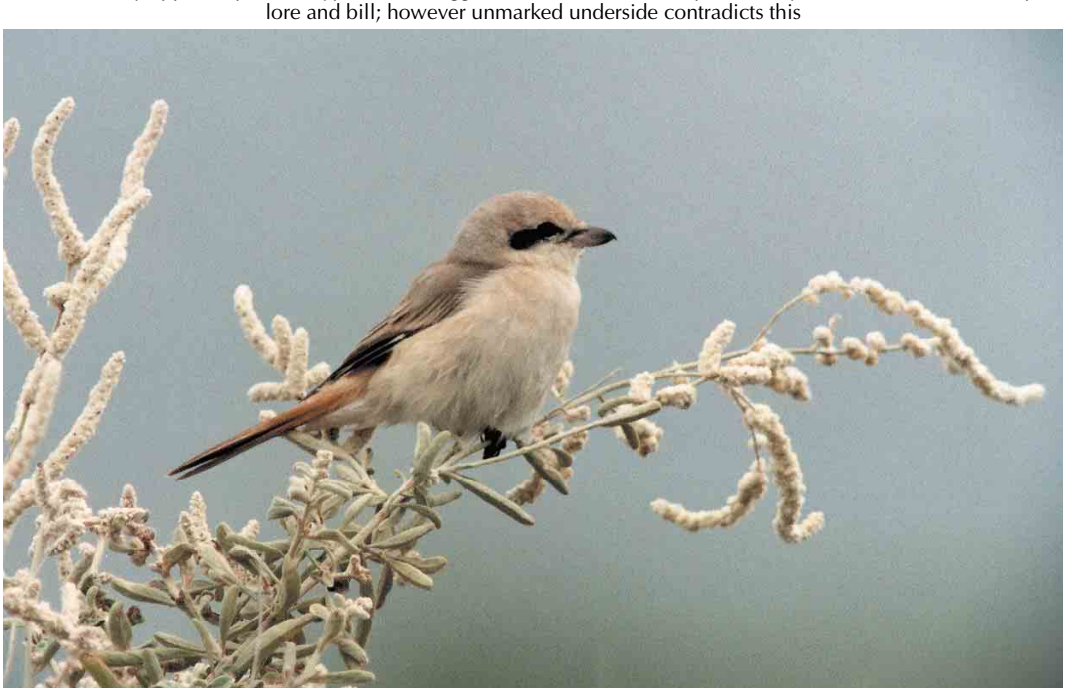
The breast and flank vary from creamy-buff to quite deep orange-buff and usually differ markedly from those of *phoenicuroides*. The crescentic bars on the side of the throat, breast and flank are rather warm brown or even pale rufous and thus usually much less obvious than the dark brown or blackish bars typical of *phoenicuroides*. However, a small number of first-winter *isabellinus* (probably less than 5%) approach *phoenicuroides* in this and are probably best identified, if at all, using a combination of other features.

The upperside is usually warmer and paler than in *phoenicuroides* but a small number of birds are rather darker and can be identical. The tone to the underside is then of critical importance. Any juvenile-type barring is usually finer and less distinct. The crown is sometimes slightly ginger toned, more so than in *arenarius*. The



341 *Isabellinus*, first-winter, Holme, Norfolk, England, 19 October 1996 *(Ray Tipper)*. Very similar to bird in plate 338

342 Probable *isabellinus*, United Arab Emirates, January 1998 *(Steve Young/Birdwatch)*. At first glance male *arenarius*; however rather rich colour of tail, together with blackish remiges, indicate *isabellinus*. Very dark ear-covert patch and lack of any apparent juvenile-type feather suggest this bird is adult and presumably therefore female due to pale lore and bill; however unmarked underside contradicts this



rump and tail are similar to those of *phoenicuroides* and thus darker and more rufous than in *arenarius*. The wing (including the tertials and wing-coverts) is generally intermediate in appearance between that of the two other isabelline shrikes, with the 'juvenile lines' being typically less obvious than in *phoenicuroides* but stronger than in *arenarius*. Retained juvenile median wing-coverts tend to be less marked than in *phoenicuroides* due to the more buff or even ginger feather-centres.

The bill is similar to that of *phoenicuroides* but it probably averages paler.

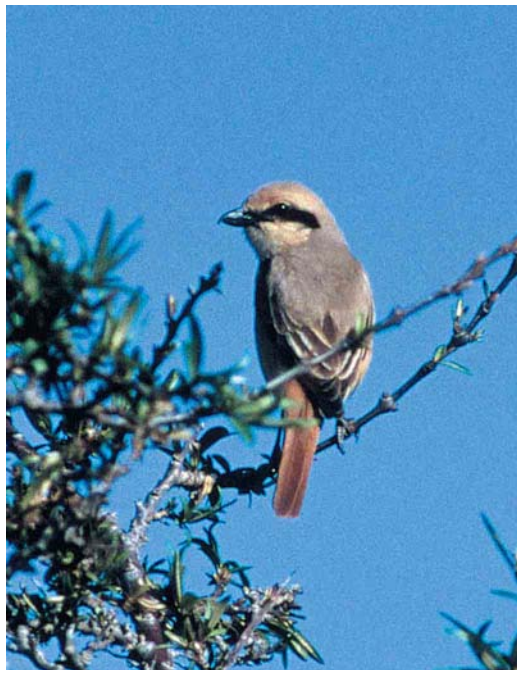
Arenarius

Structure
As might be expected of a shorter-distance migrant, the wing is shorter and more rounded than in *phoenicuroides* and *isabellinus*. Often, only five primary-tips are visible on the closed wing and p2 is usually no longer than p6. The tail, though similar in length, appears longer than in the other isabelline shrikes due to the shorter wing.

Adult male
Adult *arenarius* (the sexes are extremely similar) are by far the palest and least well marked of all isabelline shrikes. In their weaker head pattern and paler wing, they differ from *isabellinus* in much the same way as Isabelline Wheatears differ from Northern Wheatears *O oenanthe*. Male *arenarius* are more likely to be confused with females of the other taxa rather than males – but beware of *phoenicuroides* of the type '*karelini*' (and some *isabellinus*?) with a pale lore.

Alone among the '*cristatus* group', male *arenarius* never show a complete black mask. The lore is pale with only a dark spot in front of the eye. The supercilium, if present, is buff and inconspicuous and the ear-coverts are dark brown (not black) although this can be difficult to detect at a distance.

The upperside is sandy grey-brown ('isabelline') and paler than in *isabellinus*. There is little contrast between the upper- and underside. The crown is never contrastingly warmer and the rump and tail show only a pale rufous or cinnamon tinge, much less bright than in the previous two taxa but usually still contrasting with the duller mantle. The wing (including the tertials and wing-coverts) is brownish rather than black and particularly the broadly buff-fringed tertials and wing-coverts show very little contrast with the mantle. A small pale buff or off-white primary-patch is visible on many males although frequently difficult to detect. The underside is fairly uniformly pale salmon-pink or buff when fresh, usually paler on the centre of the throat and never as whitish as in *phoenicuroides* or as bright as in some *isabellinus*.



343 *Tsaidamensis*, adult male, Qaidam basin, Qinghai, China, 19 June 1997 *(Geoff Carey)*. Breeding male. Solid black mask, dark wing and deep rufous tail all resemble typical *isabellinus* rather than *arenarius*

The bill is most commonly pale grey-pink at the base, darkening to dark grey or even blackish at the tip. However, some birds show a much darker bill, similar to that of *isabellinus*.

Adult female
Females are extremely similar to males and in many cases may be impossible to sex. The mask averages typically slightly paler brown, with even less dark on the lore. Barring on the underside, if present, is pale and faint. Female *isabellinus* very rarely (if ever) show a detectable primary-patch.

First-winter
The differences from *isabellinus* in particular are rather slight. Identification should be based on structure (a short rounded wing relative to the



344 Probable *arenarius*, adult male, Band-i-Amir, Afghanistan, August 1970 *(Stuart L Pimm)*. Very similar to bird in plate 342 but browner and apparently freshly moulted remiges and wing-coverts, together with pale tail, suggest *arenarius*. Blackish (though reduced) mask and obvious primary-patch indicate male

tail) and overall pallid, uniformly buffish appearance. Barring is faint in juvenile plumage. Any feather on the upperside retained after the post-juvenile moult would probably be undetectable in the field. Barring on the underside, if visible, is very pale and fine. Juvenile tertials and wing-coverts are also poorly marked and, if retained, appear plainer than in *isabellinus* and particularly *phoenicuroides*.

The bill averages possibly slightly paler than in *isabellinus* but this is of very doubtful use in the field.

Cristatus

Structure

Together with *lucionensis* and *superciliosus*, *cristatus* is a more robust bird than the previous taxa, with a larger head and a longer, deeper and more hooked bill. The wing is shorter and more rounded and the tail is longer, narrower and more graduated. The primary projection is short, with typically five (occasionally four or six) primary-tips visible on the closed wing. P1 is rather long and p2 short, the tip usually falling short of p6.

Adult male

The solid black mask and bill, combined with a broad well-defined whitish forehead (frontal band), supercilium and russet crown, give an appearance similar to that of darker male *phoenicuroides*. The rich brown upperside without a contrastingly reddish tail and the lack of a primary-patch are however obvious differences.

There is usually no contrast between crown and mantle but a very slightly brighter ochraceous-tinged crown can sometimes be seen at close range. This never matches the bright orange-rufous of *superciliosus* which in this taxon also extends to the uppertail-coverts. The rump is often the brightest part of the bird, occasionally appearing rufous. However, the tail is typically a duller ochraceous-brown. The wing is dark brown; the tertials and wing-coverts are fringed with deep buff or ochraceous-brown when fresh and with pale buff when faded. There is normally no visible primary-patch but a few birds show a tiny pale spot at the base of the inner primaries. The throat is whitish to pale buff, often contrasting with the bright orange-buff breast and flank. On better-marked birds, the rear-flank often

shows an intense cinnamon wash.

Males of the type '*confusus*' are very similar, differing only in the slightly drabber brown tone to the upperside and, on average, the slightly paler forehead. However, these differences are so slight, even when comparing series of specimens, as to cast serious doubt on the diagnosability, and thus validity, of this taxon.

The bill is black but at least some apparent males show an obvious pale base, particularly to the lower mandible, in winter.

Adult female
The overall colour tones are similar to those of males, thus warmer brown on crown and mantle than in *lucionensis* but less bright rufous than in *superciliosus*. The differences between females of the different taxa are slightly less marked than between males but most individuals should be separable. Since female *lucionensis* show a distinctly greyish crown (and often nape) and female *superciliosus* rarely show more than a suggestion of faint barring below, any female with a brown crown and distinct barring on the underside should be a *cristatus*.

The bill is always predominantly dark or even black but many (perhaps always autumn or first-winter) birds show a pale-based lower mandible.

First-winter
After the post-juvenile moult, first-winters are plain above and are thus similar to poorly marked adult females. However, some birds migrate in partial juvenile plumage, showing (occasionally obvious) barring on crown, scapulars and uppertail-coverts as well as retained juvenile wing-coverts. Such birds may resemble first-winter *collurio* but structural differences (a larger head and bill, a much shorter primary projection and a longer tail) should be apparent. Plumage features will also help. First-winter *cristatus* are more uniformly warm brown from forehead to tail whereas first-winter *collurio* tend to show at least some contrast with a greyer nape and rump. The juvenile tertials and wing-coverts of *cristatus* are dark brown and the subterminal lines consequently are less distinct. In *collurio*, these feathers are typically paler and rufous with a more obvious subterminal line. The ear-covert patch in *cristatus* is dark (often blackish) brown and the lore is darker than in *collurio*, giving the mask a more complete appearance. The underside is buffish (rather than whitish) in *cristatus* but the strength and extent of barring may be identical with those in *collurio*. The outer rectrices may be pale brown or even buff on the outer web but never white as in *collurio*.

Separation from *lucionensis* and *superciliosus*, while less straightforward, will rely on the same plumage features which permit the identification of adults. Birds moulting into first-winter plumage begin to show adult-type body-feathers and are thus generally easier to identify than when in complete juvenile plumage. First-winter *cristatus* often show a rich brown or even slightly rufous crown and this usually appears slightly warmer in tone than the mantle. In *lucionensis*, the pattern is reversed, the crown is usually duller or greyer than the mantle if any difference is apparent. However, many *cristatus* (and probably *lucionensis*) migrate in partial juvenile plumage and thus show no contrast in tone between crown and mantle and may be inseparable. First-winter *superciliosus* differ in the generally stronger rufous colour overall (the mantle is often as rufous as the crown) and typically broader and whiter supercilium and forehead.

The bill is often darker overall than in *collurio* or isabelline shrikes but it still shows a noticeable paler grey-pink base to both mandibles.

In eastern and south-eastern Asia, confusion with Tiger Shrike *L tigrinus* is possible. However, first-winter Tiger Shrikes are heavily barred from the crown to the uppertail-coverts and, diagnostically, show at least some barring on the tertials and greater wing-coverts (this often takes the form of jagged or interrupted subterminal lines). While some *cristatus* undoubtedly migrate in partial juvenile plumage, any barring on the mantle is rather faint and interspersed with plain first-winter feathers, and the tertials and greater wing-coverts are unbarred.

Lucionensis

Structure
As *cristatus*.

Adult male
Males are very distinctive and readily separated from *cristatus* (and *superciliosus*) by their lavender-grey crown and dull brown mantle. The supercilium is often less obvious than in the other brown shrikes as it is usually greyish rather than white and merges with the crown. For the same reason, male *lucionensis* never show the distinct frontal band of the other taxa. The wing (including the tertials and wing-coverts) is dark brown (possibly less contrastingly dark than in the other two taxa), with a pale greyish-buff



345 *Cristatus*, adult male, Beidaihe, Hebei, China, 18 May 1991 *(Paul J Leader)*. Note rich brown upperside, slightly more rufous on crown, duller brown tail and striking white supercilium and forehead. Primary projection is short, with just five primary-tips showing

fringe to the feathers. The rump and uppertail-coverts are more chestnut or rufous in tone while the tail is dark dull brown. The throat is white, contrasting with the warm cinnamon-buff of the rest of the underside.

The bill is black but like in *cristatus* it may show a pale base in winter.

An unknown proportion of males show a more brownish crown, the pure lavender-grey being restricted to the forehead and the side of the crown. While still being clearly separable from *cristatus*, such birds may represent intergradation between the two taxa and may of course be related to the slightly greyer-brown tone of birds of the type '*confusus*'.

Adult female
Females are usually very similar to males, often differing only in the slightly browner mask (less solid black on the lore) and in the presence of some dark barring on the underside. A pale-based lower mandible, in spring and summer at least, is probably also indicative of a female.

First-winter
First-winters are usually quite different from *superciliosus* but they can only be distinguished with care from (often very similar) *cristatus*. The mantle is quite dull brown or even greyish-brown and the crown often appears slightly greyer, never rufous, and may be noticeably paler towards the forehead. The upperside, apart from the rump, never shows the russet tone shown by many *cristatus* and all *superciliosus*. However, some *cristatus* (presumably of the type '*confusus*') can appear quite dull and definite identification may not always be possible. Also beware of partially moulted birds (see *cristatus*). The rump is quite rufous, contrasting well with the duller mantle and tail.

The bill is similar to that of *cristatus*.

Superciliosus

Structure
As *cristatus* but *superciliosus* averages even larger headed and longer billed.

Adult male
The very rich rufous colour of the upperside and the broad white supercilium and forehead are distinctive. While some *cristatus* can show a slight rufous tone to the crown, this is never as strong as in *superciliosus* which can appear distinctly reddish from crown to rump.

As its scientific name implies, the supercilium is very prominent, often being as broad as the black mask, and meeting across the bill in a broad frontal band. The tail is similar in colour to that of the other brown shrikes. The wing is dark brown or even blackish-brown and the feathers are fringed with rufous when fresh. The throat is whitish, contrasting somewhat with the rich cinnamon-buff of the rest of the underside as in *lucionensis* but unlike many *cristatus*.

The bill is black.

Adult female
Females are often indistinguishable from males. It is possible that only young birds (second calendar-year only?) show a brownish and/or incomplete mask and barring on the underside.

First-winter
First-winters are readily distinguished from *lucionensis*, the main difficulty being the occasional rather rich brown *cristatus*. They are typically more rufous on the crown and importantly on the mantle than *cristatus* (and obviously more so



346 *Cristatus* or *lucionensis*, first-winter, Hong Kong, China, 15 September 1993 *(Paul J Leader)*. Note rather strong head pattern, particularly dark lore, compared with isabelline shrikes or *collurio*. At least two retained juvenile inner greater wing-coverts and barring on crown and uppertail-coverts. First-winter *cristatus* is often warmer brown than this and first-winter *lucionensis* typically greyer on forehead and crown but many like this are probably inseparable until winter (pre-breeding) moult

347 *Cristatus*, first-winter, Hong Kong, China, 2 October 2000 *(Paul J Leader)*. Rich brown upperside rules out *lucionensis* while not rufous enough for *superciliosus*



than *lucionensis*). Also the forehead is often paler than in *cristatus* and recalls the pattern found in adults. For differences from *collurio* (which can also appear very rufous above), see *cristatus*.

The bill is similar to that of *cristatus*.

Identification summary

Adult males

Isabelline shrikes

Phoenicuroides: Head pattern striking, with distinct white supercilium, black bill and mask and white throat; crown usually rufous although grey in type '*karelini*'. Below whitish, with at most pale pinkish-buff wash. Remiges blackish, with white primary-patch. Tail contrastingly rufous.

Isabellinus: Appearance uniform, with indistinct buff supercilium, bill usually paler at base, buff throat. Below buff, often deep on flank. Remiges blackish, with off-white or buff primary-patch. Tail contrastingly rufous.

Arenarius: Appearance pale and uniform, indistinct face pattern, pale-based bill, lore paler than ear-coverts. Remiges grey-brown, with small or indistinct pale primary-patch. Below pale buff. Tail pale cinnamon-rufous.

Brown shrikes

Cristatus: Head pattern striking, with distinct white supercilium and forehead, black bill and mask. Above, from crown to tail, uniformly warm brown, crown and rump usually slightly brighter. Breast to undertail-coverts orange-buff. No white primary-patch.

Lucionensis: Crown grey, merging with grey-brown mantle, indistinct fore-supercilium, whitish throat. Breast to undertail-coverts orange-buff. No primary-patch.

Superciliosus: Crown and mantle rich bright rufous, tail slightly duller. Head pattern striking, with broad white supercilium and forehead, whitish throat. Breast to undertail-coverts orange-buff to pale rufous. No primary-patch.

First-winters

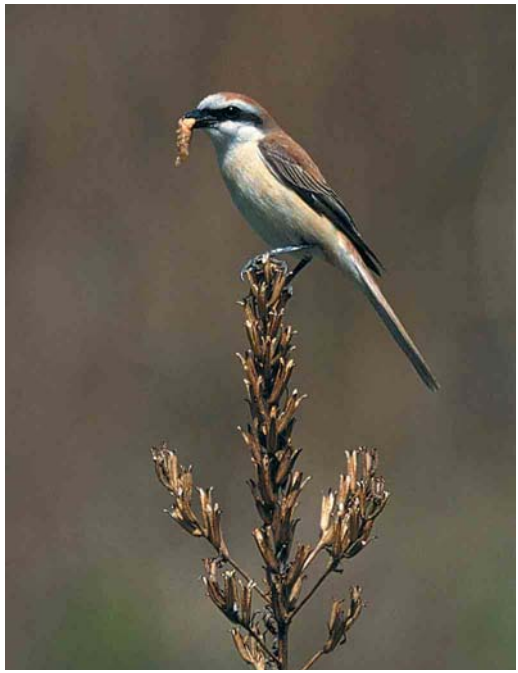
Red-backed shrikes

Collurio: Above and below strongly barred. Tail white edged and greyish below.

348 *Lucionensis*, adult male, Hong Kong, China, 15 May 1994 *(Paul J Leader)*. Warmer brown mantle, browner rear crown and more obvious supercilium are different from bird in plate 349 and possibly indicate influence of *cristatus* genes







349 *Lucionensis*, adult male, Hong Kong, China, 26 May 1990 *(Paul J Leader)*. Obviously grey crown, virtually no supercilium and dull brown mantle all quite different from both *cristatus* and *superciliosus* **350** *Superciliosus*, adult male, Nagano, Japan, 5 June 1996 *(Takuya Kanouchi)*. Note very broad white frontal band and supercilium and rich rufous-brown crown and mantle (not reproduced well in this photograph). Small white spot at base of primaries rarely shown by brown shrikes

Isabelline shrikes
Phoenicuroides: Above earth-brown to pale sandy-grey, mostly unbarred. Below whitish, barring dark brown. Tail rufous below and lacking white edges. Primary-patch on many birds.
Isabellinus: Above pale sandy-grey (rarely earth-brown), barring faint or absent (except sometimes on crown and uppertail-coverts). Below warm buff or orange-buff, barring usually faint and ginger-brown (but can be dark brown). Tail as in *phoenicuroides.* Primary-patch on many birds.
Arenarius: Above and below very pale and uniform, barring always faint (often undetectable). Wing pale brown. Tail pale cinnamon above and below. Probably never shows primary-patch.

Brown shrikes
Cristatus: Above neutral brown, with often warmer-toned rump. Above often some barring but never as much as in *collurio.* Below buff with strong barring. Tail dull brown, lacking white or rufous.
Lucionensis: Above grey-brown, with often greyer crown and paler forehead. Rump contrastingly rufous or cinnamon. Tail and underside as in *cristatus*.
Superciliosus: Above rich rufous-brown, forehead paler. Tail and underside as in *cristatus*.

Final remarks
It should not be thought that this article is much more than an attempt to clarify, to highlight misconception and to a certain degree to suggest a basis for identifying some (but not all) birds previously thought unidentifiable. Received wisdom has for many years held that most European (predominantly British) records of isabelline shrikes refer to *phoenicuroides*, with a few suspected *arenarius.* As well as being erroneous (Warbling & Worfolk in prep), this view has not fostered much research into the identification of the various taxa. The recent occurrence (whatever the provenance) of a *lucionensis*, or an intergrade between *cristatus* and *lucionensis*, in Ireland (Crosher 1999) has revealed parallel



351 *Superciliosus*, adult female, Nagano, Japan, 5 June 1996 *(Takuya Kanouchi)*. Only identified as female by behaviour. Note solid black mask and bill and lack of barring on underside, typical of many (all?) older females

352 *Superciliosus*, first-summer female, Nagano, Japan, 5 June 1996 *(Takuya Kanouchi)*. Note deep rufous crown (and mantle, although not visible here) of *superciliosus*. Incomplete mask and barring on underside possibly only shown by young females as here



shortcomings in popular understanding of the taxonomy and field characters of brown shrikes. It is also a commonly held view that the various taxa of isabelline shrikes intergrade extensively with each other; identification of immatures is thus held to be impossible. There is practically no evidence in the primary literature to support this view which is not to say it might not be correct in some cases.

It would be foolhardy to pretend that every bird can be assigned using the above criteria. Many first-winter brown shrikes and a few isabelline shrikes are apparently so intermediate that definite identification is not possible at present. A work like this is necessarily somewhat exploratory in its nature and I hope that it is viewed more as a stimulus to further research than as an attempt to write the final word on the subject.

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Samenvatting
HERKENNING VAN GRAUWE KLAUWIEREN, IZABELKLAUWIEREN EN BRUINE KLAUWIEREN Dit artikel behandelt de herkenning van klauwieren *Lanius* uit de zogeheten '*cristatus* sensu lato groep', bestaande uit grauwe klauwieren, izabelklauwieren en bruine klauwieren. De taxonomie van deze groep is complex en heeft in de afgelopen decennia verschillende behandelingen gekend. Bovendien is gebleken dat er gedurende lange tijd een naamsverwisseling heeft plaatsgevonden. Pearson (2000) toonde aan dat het type-exemplaar van *isabellinus* feitelijk het taxon is dat broedt in Mongolië, Transbaikal en Noord-China. Sinds Stegmann (1930) werd dit taxon foutief *speculigerus* genoemd terwijl de naam *isabellinus* gebruikt werd voor het taxon van het Tarim-bekken, China. *Speculigerus* is derhalve een synoniem van *isabellinus* en in dit artikel wordt het Mongoolse taxon verder aangeduid met *isabellinus*. Een nieuwe naam is dan eveneens nodig voor het taxon van het Tarim-bekken. Pearson suggereerde daarvoor *arenarius* (naar Stresemann & Stresemann 1972) en ook deze naam wordt in dit artikel verder gebruikt voor dit taxon.

In dit artikel worden de belangrijkste taxa afzonderlijk beschreven en besproken, los van de vraag of deze als soort of ondersoort beschouwd (moeten) worden. De volgende taxa worden behandeld: de '*collurio* groep' (grauwe klauwieren), bestaande uit *collurio* (Grauwe Klauwier); de '*isabellinus* groep' (izabelklauwieren), bestaande uit *phoenicuroides* (Turkestaanse Klauwier), *isabellinus* (Daurische Klauwier, voorheen *speculigerus*; cf Pearson 2000) en *arenarius* (voorheen *isabellinus*, cf Pearson 2000, en met inbegrip van *tsaidamensis*; Chinese Klauwier); en de '*cristatus* sensu stricto groep' (bruine klauwieren), bestaande uit *cristatus* (Bruine Klauwier of Siberische Bruine Klauwier), *lucionensis* (Chinese Bruine Klauwier) en *superciliosus* (Japanse Bruine Klauwier). Binnen verschillende soortconcepten worden de drie groepen tegenwoordig als afzonderlijke soorten beschouwd. Op grond van de uitgangspunten van het fylogenetische soortconcept (PSC) is waarschijnlijk sprake van zeven verschillende soorten. De drie izabelklauwieren worden in Nederland als afzonderlijk soorten beschouwd (Sangster et al 1999).

Van de verschillende taxa wordt de verspreiding besproken – alle broeden in het Palearctische gebied en overwinteren in Afrika en/of Zuid-Azië – en wordt ingegaan op het voorkomen als dwaalgast buiten de reguliere verspreidingsgebieden. Op grond van broedgebied en trekgedrag zijn met name *isabellinus* en *cristatus* en in iets mindere mate *phoenicuroides* te verwachten als dwaalgast in Europa. Daarbij is opvallend dat *cristatus* met slechts drie (of vier) Europese gevallen (zie appendix 1) veel zeldzamer is dan op grond van broedgebied en trekgedrag verwacht mag worden. In tegenstelling tot wat voorheen gedacht werd, is *isabellinus* van de izabelklauwieren de meest aannemelijke dwaalgast naar Europa. Een natuurlijk voorkomen als dwaalgast van de oostelijke taxa *arenarius, lucionensis* en *superciliosus* in Europa lijkt onwaarschijnlijk.

Bij de herkenning wordt eerst ingegaan op structurele verschillen (vooral in handpenprojectie en

staartvorm), bepaling van geslacht en leeftijd (met afnemende verschillen tussen de geslachten van west naar oost), rui (van beperkte waarde voor herkenning van de taxa), algemene aanwijzingen voor de herkenning, en hybriden. Een aantal types hybriden wordt beschreven. Hoewel hybriden met enige regelmaat voorkomen (en voor grote determinatieproblemen kunnen zorgen), bestaat er voor de vaak geopperde brede hybridisatiezones tussen bepaalde taxa nauwelijks concrete onderbouwing.

Van de zeven behandelde taxa worden de structuur en de verschillende kleden gedetailleerd beschreven waarbij de nadruk ligt op onderlinge verschillend tussen vergelijkbare kleden in leeftijd en/of geslacht. De meeste herkenningsproblemen doen zich voor bij vrouwtjes en onvolwassen vogels. Goede kennis van de kleden van adulte mannetjes helpt om de meer subtiele verschillen in deze moeilijke kleden te kunnen onderscheiden. De kleden van Grauwe Klauwier (vooral van adulte mannetjes) worden in dit artikel als bekend verondersteld. De belangrijkste kenmerken kunnen als volgt worden samengevat (de kenmerken voor eerste-winters komen grotendeels overeen met die van (adulte) vrouwtjes).

Izabelklauwieren: adulte mannetjes
Phoenicuroides: Koptekening opvallend, met duidelijke witte wenkbrauwstreep, donkere snavel en masker; bovenkop meestal roodbruin maar grijs bij type '*karelini*'. Onderzijde witachtig met hooguit bleek roze tot zeemkleurig waas. Slagpennen zwartachtig met witte handpenvlek. Staart contrasterend roodbruin.
Isabellinus: Uniform uiterlijk met onopvallende zeemkleurige wenkbrauwstreep. Snavel meestal lichter aan basis. Onderzijde zeemkleurig, vaak diepgekleurd op flank. Slagpennen zwartachtig, met vuilwitte of zeemkleurige handpenvlek. Staart contrasterend roodbruin.
Arenarius: Uniform en bleek uiterlijk. Koptekening onopvallend, snavel met lichte basis, teugel lichter dan oorstreek. Slagpennen grijsbruin, met kleine of onopvallende handpenvlek. Onderzijde bleek zeemkleurig. Staart bleek kaneelkleurig tot roodbruin.

Bruine klauwieren: adulte mannetjes
Cristatus: Koptekening opvallend, met duidelijke witte wenkbrauwstreep en wit voorhoofd, zwarte snavel en zwart masker. Bovenzijde uniform warmbruin, meestal iets helderder op bovenkop en stuit. Borst tot onderstaartdekveren oranje-zeemkleurig. Geen witte handpenvlek.
Lucionenis: Bovenkop grijs, overgaand in grijsbruine mantel. Onopvallend voorste deel van wenkbrauwstreep. Keel witachtig en rest van onderzijde oranje-zeemkleurig. Geen handpenvlek.
Superciliosus: Bovenkop en rest van bovenzijde diep en helder roodbruin, staart iets minder warm. Koptekening opvallend, met brede witte wenkbrauwstreep en wit voorhoofd. Keel witachtig en rest van onderzijde oranje-zeemkleurig tot bleek roodbruin. Geen handpenvlek.

Grauwe klauwieren: eerste-winters
Collurio: Boven- en onderzijde zwaar gebandeerd. Staart met witte zijden, onderstaart grijs.

Izabelklauwieren: eerste-winters
Phoenicuroides: Bovenzijde aardebruin tot bleek zandgrijs, grotendeels ongebandeerd. Onderzijde witachtig, bandering donkerbruin. Onderstaart bruinrood en zonder witte zijden. Lichte handpenvlek bij veel individuen.
Isabellinus: Bovenzijde bleek zandgrijs (zelden aardebruin), bandering vaag of ontbrekend (behalve soms op bovenkop en bovenstaartdekveren). Onderzijde warm zeemkleurig of oranje-zeemkleurig, bandering meestal vaag en geelbruin (maar kan soms donkerbruin zijn). Staart als bij *phoenicuroides*. Lichte handpenvlek bij veel individuen.
Arenarius: Boven- en onderzijde zeer bleek en uniform, bandering altijd vaag (vaak onzichtbaar). Vleugel lichtbruin. Boven- en onderstaart bleek kaneelkleurig. Waarschijnlijk nooit lichte handpenvlek.

Bruine klauwieren: eerste-winters
Cristatus: Bovenzijde bruin, vaak met warmer gekleurde stuit. Bovenzijde vaak met enige bandering maar nooit zoveel als bij *collurio*. Onderzijde zeemkleurig met zware bandering. Staart koudbruin, zonder witte zijden of roodbruine tekening.
Lucionenis: Bovenzijde grijsbruin, vaak met grijzere bovenkop en lichter voorhoofd. Stuit contrasterend roodbruin of kaneelkleurig. Onderzijde en staart als bij *cristatus*.
Superciliosus: Bovenzijde warm roodbruin, voorhoofd lichter. Onderzijde en staart als bij *cristatus*.

Op grond van de bovenstaande kenmerken moet het mogelijk zijn om een groot aantal vogels tot op taxon te determineren. Langdurige observaties onder gunstige lichtomstandigheden en goede foto's of video-opnamen zijn daarbij vaak essentieel. Met de huidige kennis is het echter onmogelijk om sommige vogels met zekerheid te determineren; dit geldt vooral voor veel eerste-winter bruine klauwieren en voor sommige izabelklauwieren. Het laatste woord over de herkenning van deze groep is met dit artikel nog zeker niet gezegd. De hoop is daarom dat dit artikel verder onderzoek zal stimuleren.

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APPENDIX 1 Extralimital occurrence of *cristatus*. Three records in Europe: one record in Denmark (first-winter, Kroghage, Gedser, Falster, 15 October 1988) and two records in Scotland (adult, Grutness, Sumburgh, Shetland, 30 September to 2 October 1985; first-winter, Fair Isle, Shetland, 21 October 2000). Eight records in North America: five records in Alaska, USA (adult, Gambell, St Lawrence Island, 4-6 June 1977; first-winter, Shemya Island, Aleutian Islands, 10 October 1978; first-winter, Anchorage, 28 September 1983; adult, Attu Island, Aleutian Islands, 4 June 1984; and (probable) adult, Sitka, south-eastern Alaska, 26-30 November 1999), two records in California, USA (first-winter, Southeast Farallon Island, San Francisco County, 20 September 1984; and first-winter, Whitehouse Pool, near Point Reyes Station, Marin County, 28 November 1986 to 26 April 1987), and one record in Nova Scotia, Canada (adult, Halifax, 23 November to 1 December 1997) (King et al 1978, Gibson 1981, 1984ab, Morlan et al 1987, Dunn 1988, Langham 1991, Olsen 1991, Hume 1993, Foxall & McLaren 1998, Thorup 2000, Paul Lehman in litt, Deryk Shaw in litt). In summary, there are two spring records (both referring to adults) and nine autumn records (six referring to first-winters and three to adults).

EDITORS' NOTE As explained in the introductory sections of Tim Worfolk's paper, a long-existing error in the nomenclature of the isabelline shrikes should be corrected. Pearson (2000) has demonstrated that the taxon known as *speculigerus* should be named *isabellinus* whereas the taxon known as *isabellinus* should be named *arenarius*.

Deviations from the species lists used in Dutch Birding (see inside of cover) are based on decisions of the Dutch committee for avian systematics (CSNA). At the explicit request of Tim Worfolk, however, these name changes have been adopted in this special issue. It is expected that these changes will receive wide approval and also will be formally announced by the CSNA in due course.

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Voorplaat / front cover

Daurische Klauwier / Daurian Shrike *Lanius isabellinus*, adult mannetje, Al Ansab, Oman, 20 oktober 1989 *(Hans Roersma)*

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