

From the Rarities Committee's files:

A review of the identification of 'Balearic' Woodchat Shrike, and details of three British records

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Woodchat Shrike *Lanius senator* was removed from the list of species assessed by BBRC at the end of 1990. At that time, with almost 500 accepted British records since 1958, it was occurring too frequently to warrant treatment as a rarity. In general, little attention was paid to the subspecific identity of those recorded, and few submitted descriptions distinguished between birds of the nominate form, breeding closest to Britain, and those breeding on the islands in the western Mediterranean, *L. s. badius* (hereafter referred to simply as '*badius*'). As part of the extensive and ongoing review of the status of various bird forms recorded in Britain, we consulted the rarity archive with the aim of finding and examining potential records of *badius*, of which there were a small number of claims. As BBRC had previously stated, however, that it was of the opinion that the characters of *badius* were not sufficiently well defined to distinguish it from some individuals of the nominate form (*Brit. Birds* 80: 563), our expectations were not high.

If *badius* had occurred in Britain, then a straightforward review of past records of Woodchat Shrike from the BBRC archives might reveal descriptions of individuals matching the features of *badius*. First of all, however, it was important to establish whether *badius* was reliably separable from other forms

and, if so, to establish the key criteria by which it could be differentiated. Unfortunately, the treatment of *badius*, even in specialised literature, is frequently unsatisfactory (e.g. Lefranc & Worfolk 1997), and other sources (including Cramp & Perrins 1993) give a rather generalised account of the differences, the best of these being Argeloo & Meijer (1997). In view of this rather vague and imprecise treatment, BJS made a detailed study of specimens held at the Natural History Museum (NHM), Tring, in February 2002 and February 2004. This study was supported by field observations of *badius* in Mallorca and Corsica, and of other races in Portugal, Cyprus and Gambia between these dates. Furthermore, we also gathered data from a number of observers with experience of Woodchat Shrikes in areas of the western Mediterranean outwith the known breeding range of *badius* (including the Camargue, France, and the coasts of eastern Spain and western Italy). This information was vital if we were to establish whether regional variation within nominate *senator* was occurring, and whether birds from neighbouring regions exhibited any of the characters associated with *badius*. These investigations have resulted in BBRC gaining a much clearer understanding of the features by which *badius* may be identified, particularly in comparison with the most similar form, *rutilans*, which is largely restricted to southern Portugal



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Fig. 1. Woodchat Shrike *Lanius senator* of the west Mediterranean islands' form *badius*: male (left), female and juvenile (bottom).

(although, in fact, most Iberian birds appear to be more similar to *senator*).

Below, we present the results of our research, looking not only at the structural and morphological differences which should enable field identification of *badius*, but also at its status in Europe, on migration and in its wintering areas in West Africa. During the course of this study,

using the criteria listed below, we have identified a further 15 previously undetected *badius* specimens at the NHM, Tring, from both wintering areas and migration routes. Although this process has taken some time, it has resulted in three British records being found acceptable, two of which were discussed by Corso (1997). BOURC has now accepted 'Balearic' Woodchat

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11. Woodchat Shrikes *Lanius senator* of the west Mediterranean islands' form *badius*. Top, female, Mallorca, April; middle, male, Ibiza, May; bottom, male, Ghana, December.

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12. Woodchat Shrikes *Lanius senator*. Top, male *L. s. rutilans*, Portugal, April; middle, male *L. s. senator*, Spain, May; bottom, male *L. s. badius*, Formentera, Balearic Islands, Spain, May. Note in particular the pattern of white at the base of the primaries, and the fact that is much reduced or absent in *badius* compared with birds from the Iberian mainland.

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13. Juvenile Woodchat Shrikes *Lanius senator* of the west Mediterranean islands, form *badius*. Top, Tunisia, August; bottom, Balearic Islands, August. As with adults, note the lack of a white patch at the base of the primaries.

Shrike *L. s. badius* onto the British List, where it joins the nominate form *senator*. In addition, a juvenile in Shetland in September 2003 may yet prove to be the first British record of the eastern form *niloticus*, although this record is still being assessed.

Identification of 'Balearic' Woodchat Shrike

There are a number of plumage features, including the white bases to the primaries, extent of black on the forehead, and crown and underpart colour, which enable *badius* to be separated from other forms of Woodchat Shrike. In addition, structural features, including bill size and shape, wing formulae and possibly body mass, may also provide supporting evidence if a suspected *badius* is trapped and examined in the hand.

Plumage features

White at base of primaries

In general terms, it has long been understood that the best means of separating *badius* from other races of Woodchat Shrike lies in the absence, or virtual absence, of a visible white patch at the base of the primaries on the closed wing, adjacent to the primary coverts. Our investigations confirm this to be the case, and the absence of the extensive white patch of other races makes the wing of *badius* look quite strikingly different (plates 11 & 12). In reality, 60-70% of adults, both male and female, lack this white patch completely, while in the remaining 30-40%, it is restricted to a small spot at the base of the inner primaries (P7-P10, primaries numbered ascendantly). Even on these individuals, the white at the base of the primaries never extends beyond the tip of the longest primary covert – a comparison might be made here with the differences between the limited white patch at the base of the inner primaries of adult Pied Flycatcher *Ficedula hypoleuca* and the obvious white patch extending far beyond the primary coverts of adult Collared Flycatcher *F. albicollis*. Immatures are also distinct, lacking the pale creamy-white base to the primaries visible on other races (plate 13).

In other forms of Woodchat Shrike, this white patch is generally obvious, but care is needed to ensure that it is not obscured by

dislodged secondaries hanging over the inner primaries. In nominate *senator*, the depth of visible white at the base of the primaries is extensive, varying between 7.5 and 10.8 mm on adult males (personal measurements, though BWP gives 7-12 mm, while Vaurie (1955) gave a range of 10-16 mm beyond the primary-covert tips). Birds in southwest Iberia, belonging to the form *rutilans*, often show a restricted white patch on the closed wing, particularly on the outer primaries; indeed, the white patch can even appear to be entirely absent but in reality it is merely hidden by secondaries which hang over the inner primaries. This feature is apparent both on skins and in the field. In the eastern Mediterranean, *niloticus* exhibits the greatest amount of white, this extending some 17-21 mm beyond the primary coverts (Vaurie 1955). In flight, the restricted white patch on *badius* produces a narrow white bar across the inner primaries, which is quite unlike the broad and extensive white bar visible on the primaries of *senator*, *rutilans* and *niloticus* (compare photographs in Jenni & Winkler 1994 and Corso 1997). The maximum extent of white that has been recorded at the base of the primaries on *badius* is shown by a specimen from Nigeria held in the NHM, Tring (specimen no. 1966.16.5694), dated 25th February 1953. This has a buffy-white patch restricted to P6-P10 that reaches to, or just beyond, the primary coverts. Bill measurements confirm its identity beyond doubt as *badius*.

The limited amount of white at the base of the primaries gives the wing of *badius* a darker appearance. When the wing feathers are fresh, narrow pale fringes are present on the coverts, tertials and secondaries, but these are lost as the wing abrades, further enhancing the darker appearance, although the impression of a darker wing is apparent even on quite fresh birds. By early April, the absence of white fringes to the coverts is often quite marked, and on many specimens such fringing is restricted to neat white tips to the tertials and secondaries. By late May and June, these fringes may have worn off completely. Compared with other races of Woodchat Shrike, the more limited pale fringing on *badius* is obvious in the field, making the entire wing look comparatively dark. It should be noted, however, that the first Dutch record, in June 1983, showed quite prominent pale fringes to the greater coverts (Ebels 1997), and this is a variable feature that,

on its own, cannot be used for identification purposes. Nonetheless, the retention of whitish fringes to the coverts, tertials and secondaries later in the spring and early summer is more typical of other forms and, coupled with the large white patch at the base of the primaries, produces a wing that appears less black (though the feathers are in fact equally dark).

A supporting feature of *badius* examined in the hand is the amount of white on the underside of the primaries. The reduced white at the base of the upperwing primaries is mirrored on the underwing. It is restricted to a narrow white triangle on the basal fringe of the inner web of the primaries, which, on P2, broadens towards the base, but never meets the shaft before the tip of P1. The amount of white on the underside of the primaries of nominate *senator* is more extensive than on *badius* and meets the shaft at the tip of P1, while on *niloticus*, the white patch is squared off and more extensive still. The greater extent of white on *senator* and *niloticus* has the effect of producing restricted dark tips to the primaries and the white patch may be visible in flight, as it is on the upperwing, as a broad white wing-bar.

It has been suggested that only those birds trapped or collected within the breeding range of *badius* lack white on the primary bases, perhaps implying that birds which show this feature outside the breeding range could be intergrades, or are from other populations in which such variability is unknown and undocumented. Our research at the NHM, Tring, has revealed, however, that a number of specimens from the wintering grounds in West Africa also lack white on the primary bases. These include birds from Nigeria (14), Ghana (7), Mali (2), Sierra Leone (2), Ivory Coast (1) and Liberia (1). Other African specimens are also attributable to *badius*, and are probably the birds mentioned in Cramp & Perrins (1993) from North Africa, for example a Meinertzhagen specimen from Algiers, 29th March 1931 (1965.M.10169), and two immatures from Tunisia in August (one is specimen 1939.12.9.708). There is also one specimen from Morocco, plus another Meinertzhagen specimen (a male) taken in Gibraltar in March. In total, we found 48 specimens of *badius* at the NHM: 16 from Europe (including 15 collected on the breeding grounds and one on Gibraltar) and 32 from Africa (five from North Africa and 27 from wintering areas or on passage south of the Sahara).

Narrow black forehead

Compared with other races of Woodchat Shrike, *badius* shows a narrower black fore-crown band. This appears to be a consistent feature on all the specimens examined, and is observable in the field. There is, however, some variability and the presence of a narrow black forehead band may be indicative of *badius* rather than diagnostic. The figures quoted in Cramp & Perrins (1993) for the forecrown band are in the range 5-8 mm in male *badius* (mean 6.5 mm) and 8-14 mm in other races (mean 10.2 mm). Argeloo & Meijer (1997) gave a mean depth of 8.8 mm in *badius* and 10+ mm in other subspecies.

Crown colour

The reddish-brown colour on the rear crown and hindneck of Woodchat Shrikes is common to all races. In male *badius* (and possibly females), however, this tends to be rather paler than is found on other races, appearing as a more washed-out orange when compared with the deep chestnut of *senator* and *niloticus* (*contra* Clement 1995); in Portuguese *rutilans*, though, the crown is of a similar colour and tone to that of *badius*.

Underparts

Contrary to statements in the literature, the underparts of *badius* are not diagnostically whiter than those of nominate *senator* and *niloticus*. They may lack the orange-buff wash of many *senator*, but specimens of *rutilans* from Portugal and many *niloticus* show similarly white underparts.

Structure

Bill

In profile, the size and structure of the bill is notably different from that of *senator*: *badius* has an almost 'square', deep-based bill, compared with the slimmer, less chunky bill of the nominate race. Whether these differences are easily assessed in the field has been questioned, but our field observations, detailed examination of photographs and the study of specimens suggests that they can be (see plates 14 & 15). At least three of the extralimital records of *badius* (from Norway, The Netherlands and Ireland) involved notably large-billed birds. Similar differences in bill structure in other species of shrike are relatively easy to assess in the field; for example, in eastern Asia, the large-billed Tiger Shrike *L. tigrinus* has a noticeably dif-



14 & 15. Woodchat Shrikes *Lanius senator*. Plate 14: top, male *L. s. badius*; middle, male *L. s. rutilans*; bottom, male *L. s. senator*. Plate 15, all *L. s. badius*: top, juvenile female, Nigeria, January; middle, female, Mallorca, May; bottom, male, Mallorca, May. Note the markedly deep bill of *badius*, which is particularly evident in plate 14 when compared directly with *rutilans* and *senator*.

ferent bill structure to that of the slimmer-billed Brown Shrike *L. cristatus*. In the hand, bill shape should certainly support the more obvious features. We can only speculate as to the reason for the bill of *badius* being significantly bigger than that of *senator*, though this seems most likely to be related to diet on the breeding or wintering grounds.

Measurements of 20 specimens of *badius* and *senator/rutilans* at the NHM, Tring, gave bill depths (measured at the distal end of the nostrils) in the range 7.9-8.9 mm (mean 8.6 mm) for *badius* and 6.3-7.6 mm (mean 7.1 mm) for *senator* and *rutilans*. Bill length is less important, although *badius* is slightly longer-billed on average than *senator*; ten *badius* measured 10.9-12.4 mm (mean 11.7 mm) from the bill-tip to the proximal edge of the nostril, while the comparable measurements of ten *senator/rutilans* from Iberia were 9.9-11.4 mm (11.0 mm; fig. 2).

Wing

Subtle differences in wing structure are evident among the races of Woodchat Shrike, being most apparent in the relative positions of the tips of P2 and P5. In *badius*, P2 usually falls level with P5, while in *senator*, the tip of P2 falls between that of P5 and P6, and usually closer to P6. This is a result of *senator* having a longer P5, which lies closer to the wing-point, so that the primary tips appear to be evenly spaced and quite closely bunched together. In *badius*, however, the primaries are more widely spaced, with the distance between P5 and P4 being greater than that between P4 and the wing-point, which is formed by P3. Wing length itself is not a discriminatory feature, although *badius* has, on average, a marginally longer wing than *senator*. Cramp & Perrins (1993) give the wing length of 13 male *badius* from the Balearic Islands as 100-106 mm (mean 102.8 mm), and of four females, also from the Balearics, as 100-103 mm (mean 101.2 mm). Wing length of

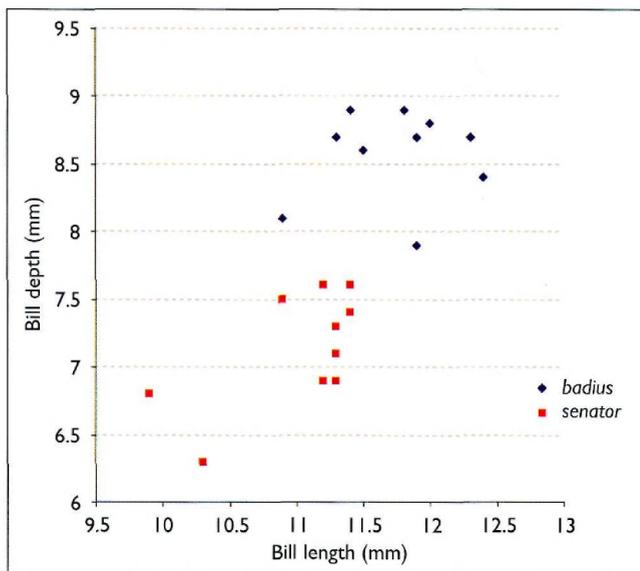


Fig. 2. Comparison of bill measurements of Woodchat Shrike *Lanius senator* of nominate form *senator* (from Spain and Portugal) and the west Mediterranean islands' form *badius*. Measurements by BJS from specimens held at the Natural History Museum, Tring. Bill length is measured to proximal edge of the nostril, and bill depth measured at distal edge of the nostril. Note that bill length of *badius* is only slightly longer than that of *senator*, but that bill depth of *badius* is noticeably greater.

badius from Corsica averages slightly shorter, mean 100.4 mm in males (n=13), and 99.6 mm in females (n=8). Svensson (1992) provided a slightly wider range for *badius*, 98-106 mm, although this includes birds of both sexes and all ages. In comparison, Cramp & Perrins (1993) present the wing lengths of 24 male *senator* from western Europe as 98-102 mm (mean 100.5 mm), and for 11 female *senator* as 97-103 mm (mean 99.7 mm). Svensson (1992) gave wing lengths of 91-102 mm for *senator* and *rutilans* combined, although again this encompasses birds of both sexes and all ages, and is based upon specimens measured throughout the range of these races. These measurements are virtually identical to those of *badius* from Corsica (91-102 mm for males and females combined; Svensson 1992).

Weight

Although there are few comparative data on the weights of the various forms of Woodchat Shrike, in the field *badius* can give a bulky and large-headed appearance, which, together with the large bill, may be quite noticeable.

Intergradation

Despite the fact that *badius* regularly overshoots the islands in the western Mediterranean in spring, it appears that intergradation between *badius* and *senator* has never been confirmed (A. Corso, P. Dubois, J. del Hoyo pers. comms.). In the past, concerns have been expressed about intergrades between *badius* and *senator* (Hartert 1903-1910; Streseman 1920; Hope Jones 1966), with records outside the known breeding range not being treated as *badius*. Detailed observation of birds in the field, combined with examination of skins and the comments of many other observers with experience in the Mediterranean basin, has failed to provide any evidence that birds with intermediate characters exist. At the NHM, Tring, no specimens of any race other than *badius* showed the absence, or virtual absence, of white at the base of the primaries diagnostic of the Balearic race, although

two young juveniles from southern Germany, collected in July and still growing their primaries, lacked a pale area at the base of these feathers. It may well be that extralimital records, i.e. birds outside the breeding range of *badius*, or specimens of Woodchat Shrike showing limited white at the base of the primaries, were simply assumed to be intergrades. We believe that these supposed intergrades are more likely to be typical *badius*, either on migration to and from the wintering grounds or overshooting during the spring, occurring within the normal range of *senator*.

Distribution

The breeding range of *badius* is restricted to the Mediterranean islands between Spain and Italy, ranging from Ibiza in the west to Corsica and Sardinia in the east. This race is, however, frequently recorded along the coasts of France,

Italy and, less regularly, Spain, particularly in spring when migrants overshoot the breeding islands. There are also a small number of autumn records of both adults and immatures in mainland Italy. We contacted ornithologists in Italy, France and Spain to augment our observations and help us provide an up-to-date picture of the occurrence of *badius* in these countries.

Italy

In Italy, *badius* breeds extensively throughout Sardinia, where there is a large and healthy population, unlike the declining *senator* population in most of mainland Italy. Outwith Sardinia, *badius* is known exclusively as a passage migrant, primarily in spring, along the Tyrrhenian coast. Migrants occur regularly on the islands of Capri and Ischia, and the Pontino (including the islands of Ventotene, Zannone, Ponza, Palmarola) and Tuscan archipelagos

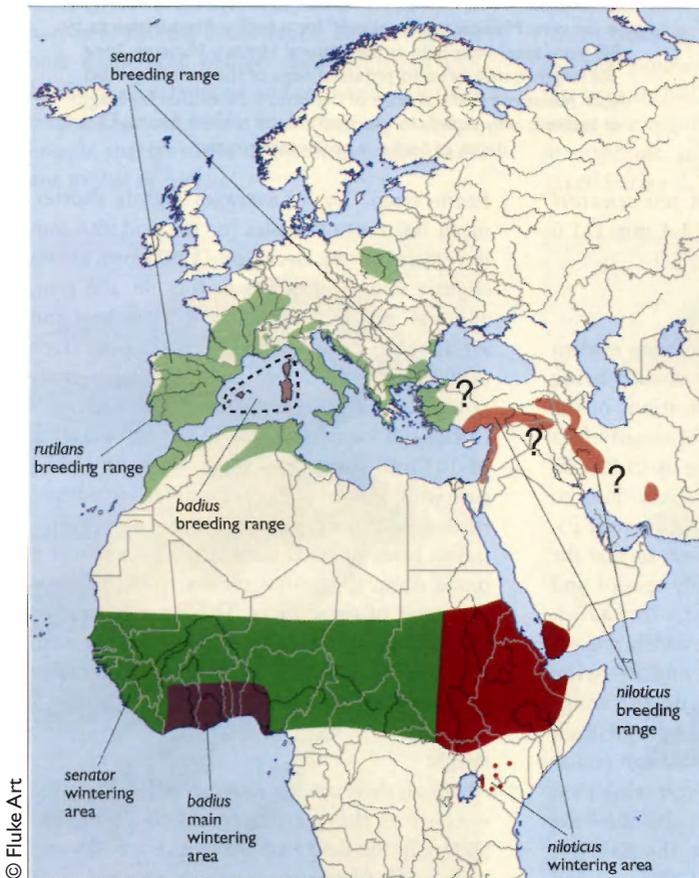


Fig. 3. The distribution of Woodchat Shrike *Lanius senator*. Modified from that first published in Lefranc & Worfolk (1997), and reproduced with permission of the publishers, Christopher Helm/A&C Black.

(including the islands of Capraia, Gorgona, Giannutri, Montecristo and Giglio). It is believed that those individuals which stop over on these islands probably continue to Sardinia and Corsica. Arrival dates show that *badius* appears on the breeding grounds, on average, ten days earlier than *senator*, and this is supported by observations along the Tyrrhenian coast (Fraticegli 1984; Fracasso *et al.* 1995).

In recent years, however, breeding pairs have been found on islands off the Tuscany coast, including Elba and Capraia. These birds may have expanded their range from nearby Corsica, which is visible from these islands on clear days. Occasionally, in Tuscany and Lazio, adult male *badius* have been observed singing in suitable habitat in late May and June, and sometimes into July. Although breeding has neither been reported nor confirmed on the mainland, it is possible that single pairs may breed in the Tolfa Mountains, north to Rome. In Sicily, *badius* is extremely rare away from the west coast, where wandering post-breeding/post-juvenile dispersal probably accounts for the majority of records. There is, however, a single breeding record from Favignana Island, Egadi, western Sicily, in 1987.

Between 1988 and 1992, as part of a migration study programme conducted in the 'Progetto piccole isole', encompassing the islands of Giannutri, Capraia, Montecristo, Ventotene and Capri, 1,716 Woodchat Shrikes were caught between 15th April and 15th May. This study established that *badius* and *senator* were occurring in roughly equal numbers in the northern islands of Montecristo, Giannutri and Capraia, with 48.6% of all Woodchat Shrikes there being *badius*. On the southern islands of Ventotene and Capri, a higher proportion of birds were *senator*, with just 14.5% being *badius*. In both subspecies, males migrate before females and immatures.

France

On Corsica, *badius* is relatively common throughout the island, preferring rough, open grassy landscapes, with scattered bushes and stone walls or buildings, frequently near cultivation. Along the mainland Mediterranean coast of southern France – most notably in the Camargue region – *badius* is a relatively frequent visitor. Arrivals start to appear from the end of March and continue until late May, but there is at least one August record. Recorded

annually, as many as 25% of Woodchat Shrikes trapped here are *badius*; Cramp & Perrins (1993) give an average of 16% *badius* (37 out of 232 birds trapped over a four-year period). There are also two extralimital records from northern France, in 1995 and 1999.

Spain

In the heart of its breeding range, *badius* is a common breeder and migrant on the Balearic Islands. Being a long-distance migrant, *badius* would be expected to overshoot its breeding islands. Although this is the case, with birds reaching northeast Spain in spring, it is an exceptionally rare migrant there, and reports from the Spanish mainland require supporting documentation for acceptance by the Spanish Rarities Committee. In fact, Cramp & Perrins (1993) note just three records of *badius* in northeast Spain in early August, while just four records of *badius* exist for Catalonia (in 1982, 1985, 1991 and 1993), and one for Valencia (in 1989); these two provinces are those closest to the Balearic Islands. There are, however, at least three recent records: two from the Ebro Delta, on 16th April 1998 and 5th May 2003, and at the Llobregat Delta, Barcelona, on 20th April 2003.

Movements and wintering

During autumn migration, *badius* Woodchat Shrikes head almost directly south of their breeding range to winter in West Africa. Lefranc & Worfolk (1997) gave the main wintering range of *badius* as extending from the Ivory Coast east to Nigeria. Subsequently, Borrow & Demey (2001) provided a slightly more accurate picture, describing the wintering range as extending 'at least from Ivory Coast to northern Cameroon'. Cramp & Perrins (1993) also include Chad and Cameroon within the wintering range of this race, and this is supported by the collection at the NHM, Tring, which includes specimens from Sierra Leone in the west (2) to Nigeria in the east (14). In these areas, Cramp & Perrins (1993) state that it 'sometimes outnumbered nominate *senator*, e.g. in southern Nigeria and coastal Togo'. There are also specimens at Tring from Mali during the winter months but, like *senator*, which sometimes arrives late in the winter (January), these may still be passage birds.

Although *badius* migrates across North Africa in both spring and autumn, records from

this region are relatively scarce. Cramp & Perrins (1993) provide some indication of its passage status, referring to studies along the Moroccan/Algerian border in spring: at Figuig, on the northern edge of the Sahara, just 1.3% of 316 Woodchat Shrikes trapped were *badius*; at Monts des Ksours, no comparative figures exist, but both *badius* and *senator* occurred and both forms were trapped. In northeast Morocco, just four of 300 Woodchats trapped were *badius*, while in Tunisia, just 2.6% of c. 3,000 Woodchat Shrikes ringed were identified as this race (A. Corso *in litt.*). At Gabes, in southeast Tunisia, the proportion of *badius* trapped was around 2% (over 3,000 Woodchat Shrikes trapped in spring over a three-year period; Cramp & Perrins 1993). In addition, two specimens at the NHM are from Tunisia in autumn, a female and an immature, and there have also been recent sight records from Tunisia in autumn (e.g. 2003). At Cap Bon, Tunisia, one *badius* ringed in spring was recovered at the same site in the autumn (Cramp & Perrins 1993), suggesting that at least some birds follow the same route between breeding and wintering areas in spring and autumn (even though there is a general tendency for spring migrants to move north on a track to the east of the one used in autumn). In Malta, ten *badius* were recorded between 1969 and 1978 during spring passage, with up to 45 Woodchat Shrikes recorded per day (Cramp & Perrins 1993).

Extralimital records in northern Europe

Extralimital records of *badius* in northern Europe are few, though it is likely that this race occurs more frequently than the available records suggest. An intriguing record from Norway concerns a juvenile male on Utsira, Rogaland, on 26th September 1972, which remained until 29th September when it was trapped and collected (Ree 1976). Two records from The Netherlands, at Knardijk on 5th June 1983 (Ebels 1997), and near Voorhout on 6th June 1993 (Argeloo and Meijer 1997), were belatedly accepted when the field characters of *badius* became better understood. In both cases, the identification was established beyond doubt by good photographs taken at the time. Two recent records from northern France involve single birds at Conan, Loir-et-Cher, on 4th June 1995, and at Beillé, Sarthe, on 12th August 1999 (P. Dubois *in litt.*). There is a recent report from Ireland, which is currently under review.

Records of *badius* in Britain

Our examination of the descriptions and photographs of Woodchat Shrikes in the BBRC archives has established that three British records described individuals showing the characters associated with *badius*. These are:

- Male, Portland, Dorset, 10th May 1986;
- Male, Great Cressingham, Norfolk, 2nd-6th July 1995;
- Female, Dungeness, Kent, 15th-21st July 1995.

Details of these first three records are presented here in appendices 1-3. The first British record, at Portland, was not photographed, but was particularly well described, much to the credit of the original observers who, at the time, believed it to be of the race *badius*. Good photographs of the second record, at Great Cressingham in 1995, have established its identity beyond doubt but, owing to it being regarded at the time as 'just another Woodchat', it was not seen by many. The Dungeness bird, also in 1995, was identified as *badius* by the finders.

Highlighting the need for care, a Woodchat Shrike in Gwent, in August 1993 was flagged up as a putative *badius* by Corso (1997) on the basis of published photographs. Examination of further photographs, however, showed that the impression of reduced white at the base of the primaries was an artefact of the secondaries hanging over the primary bases, and that there was, in fact, a large amount of white at the base of the primaries, typical of other forms.

Acknowledgments

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Appendix 1. Details and description of the Dorset badius

At 10.40 hrs on 10th May 1986, A. G. Clarke, C. D. & V. A. Head and S. I. Jones visited the cliffs at The Grove, on the northeast side of Portland, following a report of two European Bee-eaters *Merops apiaster* there. On arrival, AGC immediately noticed a passerine perched on scrub some 15-20 m from the car, beside the footpath that leads down from the clifftop to the disused railway below. On looking at the bird through binoculars, he identified it straight away as a Woodchat Shrike, a species with which he was familiar, and brought it to the attention of the others, all of whom agreed with his initial identification.

Earlier that morning, they had seen a long-staying first-summer Woodchat Shrike at the Bill and were able to make comparisons with that individual; their bird was clearly an adult male, being overall much brighter in plumage and lacking the paler areas in the face. Unfortunately, after just two minutes, the bird was lost to view so they decided to return to the Bill and alert others to its presence. Having conveyed the news, they returned to the site along with about fifty observers, including M. Cade, D. J. Holman, J. F. Ryan and G. Walbridge.

Finally, at 13.30 hrs, the bird was relocated, about 250 m from where it was originally found, frequenting an area of dense hawthorn *Crataegus* and Blackthorn *Prunus spinosa* scrub in the vicinity of the sewer pipe on the seaward side of the railway line. It was originally observed from the clifftop and so views were rather distant, but MC in particular commented on the apparent absence of any white to the primary bases (a feature clearly present on the bird seen earlier at the Bill). Several observers, including GW, made their way down the undercliff footpath, from where they were able to gain much closer and prolonged views as it performed regular feeding sallies from the tops of the scrub. These closer views confirmed beyond all doubt the absence of white in the remiges. On return to the Observatory, a literature search revealed that this feature strongly suggested the bird belonged to the form *L. s. badius*, and it was tentatively identified as belonging to this form. All those present were happy with the identification. Although the bird remained faithful to the area for the remainder of the day, there was no sign of it on the following day, 11th May.

The following description is a combination of notes made at the time by AGC, CDH, DJH and GW. Crown and nape rich chestnut-orange down to eye level. Black forehead and mask extending to rear of ear-coverts. A small pale spot in loreal area. Mantle black, paling to charcoal black. Scapulars white, forming obvious large oval-shaped patches. Wings entirely black with no white visible; in particular, no white to primary bases either at rest or in flight. Rump white. Tail black save white outers and tips. Underparts appeared mostly clean white but closer views revealed a delicate pink flush to the breast. Stout black bill typically hooked at tip. Bird fed on insects by making regular sallies from exposed perches. Also seen to wag its tail slowly up and down in typical shrike fashion.

Appendix 2. Details of the Norfolk badius

On the evening of 2nd July 1995, Andrew Goodall was approaching the crossroads on the Peddars Way footpath at Great Cressingham when he noticed a bird perched prominently on top of a thin hawthorn whip. Visibility was initially poor, owing to heavy black rain clouds, and allowed only sil-

houetted views. Even in rather poor light, the combination of its pied appearance and posture suggested it was something unusual.

Having made several trips to Menorca, AG soon recognised the bird as a Woodchat Shrike, a species he had often encountered there. In order to gain better views, he walked past the bird and looked back, the light now to his advantage. With improved views, AG ascertained that, like the Menorcan birds, this individual lacked a white patch to the bases of the primaries. The bird remained in the area until 6th July, during which time it was photographed (see *Birding World* 8: 248).

Appendix 3. Details and description of the *Kent badius*

Late on the morning of 15th July 1995, David Walker was standing in the Observatory garden at Dungeness, enjoying a cup of tea with friends, when he became aware of Common Whitethroats *Sylvia communis* giving repeated alarm calls about 100 m away. Looking in the direction of the disturbance, and expecting to find a Common Cuckoo *Cuculus canorus* being mobbed, DW was surprised to see an adult Woodchat Shrike. The bird gave excellent views in the Moat near the Observatory before flying across the shingle to an area known locally as 'the Desert', where it remained until 21st July. During this period, it was seen by a steady procession of some 500 birders.

DW noted that the bird lacked the white patch at the base of the primaries and, on consulting available literature, suspected it belonged to the form *L. s. badius*. In order to confirm the absence of this feature, DW and W. Attridge erected a couple of mist-nets and caught the bird with ease. The bird was taken to the Observatory where it was ringed, examined and photographed (plates 16 & 17). Detailed examination in the hand confirmed the absence of an obvious white wing-bar, although there was a small amount of white at the base of primaries 7, 8 and 9 (primaries measured ascendantly). In addition, it was noted that the bird exhibited white underparts, atypical of the nominate form. The bird was sexed as a female on the basis of the crown colour being a mixture of orange and buff, a poorly defined border between the black forehead and orange crown, the pale lores and the extent of grey in the rump.

Since the identification was established beyond doubt, and Woodchat Shrike was not then a national rarity, a detailed description was not taken, but the bird was photographed. Measurements revealed that the width of the black forehead band was 8.5 mm, the wing length was 104 mm, and the bird weighed 46.2 g. Subsequent examination of the photographs revealed that the tip of P2 fell level with P5, which is typical of *badius*; as described above, P2 is usually closer to P6 in nominate *senator*.



David Walker



David Walker

16 & 17. Adult male Woodchat Shrike *Lanius senator* of the west Mediterranean islands' form *badius*, Dungeness, Kent, July 1995.