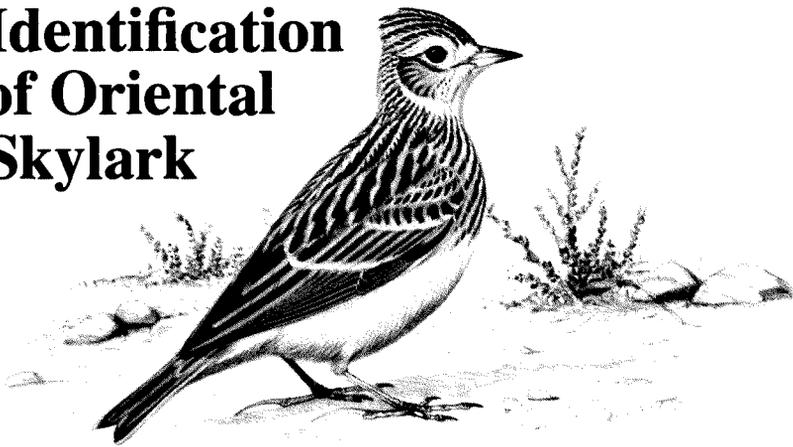


Identification of Oriental Skylark



Hadoram Shirihai

The Oriental Skylark *Alauda gulgula* (also sometimes known as Small Skylark, Lesser Skylark or Eastern Skylark) is found across a large area of southern Asia. Eleven races were recognised by Vaurie (1959), most of which are resident in tropical Asia, but *A. g. inconspicua*, which breeds west to central Asia and Iran, is migratory, though its winter quarters are not known. The species has not yet been reliably recorded in Europe, although there are several recent records for Israel (see final section, and Shirihai in prep.) and it is possible that the Oriental Skylark will eventually be found in western Europe, and perhaps even Britain and Ireland.

The main confusion species is Skylark *A. arvensis*, especially the smaller races. Given good views, however, the careful observer should not find separating them a serious problem. This paper summarises the main identification features of Oriental Skylark and its distinction from Skylark and other larks.

Identification in the field

In the field, Oriental Skylark resembles Skylark in coloration, but Woodlark *Lullula arborea* in shape and flight. Its pointed bill is relatively long and thick, and it has a shortish tail and relatively long legs. From a distance, it might even be confused with Short-toed *Calandrella brachydactyla* or Lesser Short-toed Lark *C. rufescens*. The following are important points to observe when identifying the Oriental Skylark in the field.

SILHOUETTE AND SIZE Size as Woodlark (about 16 cm in length), significantly smaller than nominate Skylark (18.5 cm). Bill seems small, but, compared with Skylark's and Woodlark's, is longer and thicker. From side, forehead looks rather flat and in line with bill. When raised, short crest gives head pointed shape. Tail looks short compared with Skylark's, and extends less beyond wing-tip, but is longer and projects more than does Wood-

lark's. Wings rather short, primaries projecting little, if at all, beyond tertials, unlike Skylark's. Generally, silhouette is that of small and squat lark, recalling Woodlark.

HEAD Dark streaks visible on forehead and crown. Ear-coverts obviously rusty toned. Nape grey to rusty-brown, with dark streaking. Chin and throat whitish, and dark moustachial and malar stripes are much less prominent than on Skylark; crest also much

less prominent. Loes and supercilium strikingly whitish, latter being longer and more noticeable than Skylark's, but do not meet at back of head, unlike Woodlark's (see fig. 1).

UPPERPARTS Brown to dark-brown feathers of mantle and scapulars have noticeably sandy fringes. Wing-coverts dark brown, also with sandy or rusty edges. Pale grey lesser coverts contrast with rusty-brown median and greater coverts. Unlike both Skylark and Woodlark, rusty fringes of primaries and secondaries give impression of very rusty-coloured wing. Rump pale rusty, with dark feather-centres.

TAIL Short and slightly forked. Outer feathers rather sandy-coloured, not white as on Skylark. (Woodlark has very short-looking tail, less forked and with white outer feathers and white tips to inner ones, giving pattern quite different from that of Oriental Skylark.)

UNDERPARTS Breast sandy-yellow, with delicate, narrow dark-brown to medium-brown streaking extending to upper belly. Belly sandy-white, lacking streaking on flanks.

BARE PARTS Bill brownish-grey, with pale greyish-yellow base to lower mandible. Legs fleshy-pink to yellow, and quite long.

Appearance in flight

In flight, Oriental Skylark's wings seem short and rounded and its tail also looks rather short. The pale trailing edge to the wing is sandy or rusty in colour, and is less noticeable than and clearly different from the contrasting white trailing edge of Skylark. The flight action of Oriental is very slow, and it tends to hover and flutter its wings when low over a field (about 30 cm from the ground). The flight silhouette is rather like that of Woodlark. At a higher altitude, its flight is faster and recalls that of Short-toed Lark or Skylark.

Voice

The Oriental Skylark's voice is totally different in character from that of Skylark and Woodlark. I transcribed its call as 'baz, baz' or 'baz-terr': the notes being staccato, reminiscent of the calls of Richard's Pipit *Anthus novaeseelandiae*. Dr J. T. R. Sharrock (*in litt.*) described the call as 'a very distinctive, soft buzz'. The species usually gives one to three calls at intervals of one to two seconds.

Summary of identification in the field

Oriental Skylark is close in colour and plumage pattern to both Skylark and Woodlark. Important features that distinguish it in the field from Skylark are its small and squat appearance and its clearly shorter tail, wings and primary projection; when standing, it shows an obviously rusty tone on the ear-coverts and wings. In flight, its short tail and short, rounded wings are apparent, while it has a sandy, not white, trailing edge to the wings, as well as sandy tail-sides. Its calls are decisively different from those of any other lark. It differs from Lesser Short-toed Lark and Short-toed Lark in its thicker and more prominent streaking on the breast and in its noticeably



Fig. 1. Head patterns of Oriental Skylark *Alauda gulgula*, Skylark *A. arvensis* and Woodlark *Lullula arborea* (*Hadoram Shirihai*)



93 & 94. Oriental Skylark *Alauda gulgula*, Israel, November 1985 (*Paul Doherty*)





95. Skylark *Alauda arvensis* with wing expanded, Israel, January 1985 (*D. Pierce, K. Foundation*)

96. Oriental Skylark *Alauda gulgula* with wing expanded, Israel, March 1985 (*Hadoram Shirihai*)





97. Oriental Skylark *Alauda gulgula*, Israel, November 1984 (*Hadoram Shirihai*)

longer and narrower bill; it is also a little larger. Woodlark has a longer white supercilium, a shorter tail with white sides and white-tipped inner feathers, and lacks the rusty-fringed primaries and secondaries of Oriental Skylark.

The coloration and build of Oriental Skylark are somewhat similar to those of various other larks, particularly Skylark; they do not attract attention. The most likely way of locating an Oriental Skylark among a flock of Skylarks is by its call.

Identification in the hand

In the hand, distinguishing Oriental Skylark from Skylark is not difficult. The main differences are in length of tail and wing, and in wing formula. The measurements of Oriental are markedly smaller than those of nominate Skylark, with hardly any overlap. The rusty outer fringes of the primaries and secondaries are typical of Oriental Skylark; the colour of the outer pair of tail feathers is also significant: sandy on Oriental, white on Skylark. Oriental also averages 15 g less in weight than nominate Skylark.

The following description is taken from personal notes made on ten individuals examined in the hand in Eilat, Israel, during autumn/winter 1984/85.

HEAD Whitish supercilium starting at base of bill, narrow at first, broad and prominent behind eye, then tapering to a point 10 mm behind eye. Lores, chin and eye-ring whitish or pale brown. Ear-coverts pale brown to rusty, slightly streaked with darker brown and encircled by blackish stripe starting under eye. Feathers of crown blackish/dark brown (80% of their centre) with buff fringes, producing streaked effect; when raised, these feathers create small crest. Throat buffish-white without clearly defined moustachial or malar stripes. Nape greyer than crown.

UPPERPARTS Dominant colour of mantle and scapulars blackish to dark brown, with feather edges pale grey to sandy. Rump and

uppertail-coverts more rusty, with only centres of feathers dark brown.

UNDERPARTS Light sandy-coloured, with breast (especially sides) narrowly and clearly streaked dark brown. Much individual variation in this pattern: some individuals have narrow and delicate streaks, others have relatively broad ones. Belly paler. Vent and undertail-coverts pale sandy-coloured.

WINGS *Upperwing* Greater coverts dark brown, broadly fringed and tipped sandy-brown (inner greater coverts edged paler, outer ones more rusty). Median coverts similar, but fringes a shade rustier. Lesser coverts dark brown, with fringes greyer than median and greater coverts. Greater primary



98. Skylark *Alauda arvensis*, Israel, January 1985 (D. Pierce, K. Foundation)

coverts dark brown, with outer webs rusty-coloured and tips sandy. Feathers of alula dark brown, outer webs with rusty fringe, and tips sandy. Primaries and secondaries dark brown, all except second primary with rusty outer webs; second primary with pale sandy outer web. Tertiaries dark brown, with outer edges rusty to pale sandy. Seventh to tenth primaries and secondaries have notched tips. Fourth to tenth primaries (mainly sixth to tenth) have rather contrasting sandy tips 1-2 mm wide forming trailing edge, less noticeable on secondaries.

Underwing Remiges grey. Coverts whitish

to sandy. Axillaries rusty to dark brown.

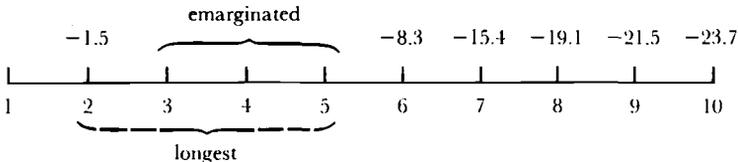
TAIL Rectrices dark brown. Outer tail feather mainly sandy; second feather with outer web sandy-coloured; third with only a sandy tip; fourth and fifth with narrow sandy edges to outer and inner webs. Fringes of central pair of feathers wider, with sandy and rusty tones.

BARE PARTS Bill small, but, compared with Skylark, looks long, thick and pointed; upper mandible brown to dark grey; lower mandible horn-grey, with dark tip. Iris brown. Tarsus and toes pale flesh-coloured; soles paler; claws pale horn.

Measurements and wing formula

Table 1 gives the average measurements of ten Oriental Skylarks which I caught at Eilat in autumn-winter 1984/85. Although some overlap occurs between measurements of Oriental Skylark and Skylark (Baker 1926; Dementiev & Gladkov 1970; Ali & Ripley 1972), this is in most cases slight, and a combination of measurements would be conclusive in identification.

The wing formula of Oriental Skylark, calculated as the average of the ten individuals examined, is shown below:



First primary 9.5-12.0 mm shorter than primary coverts. Inner secondaries - 14.3; tertiaries - 3.2

The tip of the wing is usually formed by the third and fourth primaries, although sometimes only by the fourth. It can also sometimes be formed jointly by the second to fifth.

A major distinction between Oriental Skylark and Skylark is the



99. Oriental Skylark *Alauda gulgula* and Skylark *A. arvensis*, Israel, November 1985 (Paul Doherty)

Table 1. Measurements (in mm) of Oriental Skylark *Alauda gulgula* based on ten individuals trapped at Eilat, Israel, in autumn-winter 1984/85

	Range	Mean
Wing	89.0-98.5	93.5
Wing spread	273-304	290.8
Tail	54.5-61.0	56.7
Tail difference (outer feather to inner)	2.0-6.5	3.7
Tail-tip to coverts (under)	21.0-26.0	24.8
Tail-tip to coverts (upper)	16.0-23.0	19.7
Bill (to skull)	15.0-16.5	15.8
Bill (to feathering)	9.8-11.5	10.4
Bill depth (at nostrils)	4.2-5.0	4.6
Bill width (at nostrils)	4.2-5.2	4.5
Tarsus	23.0-25.0	24.2
Tarsus thickness (at middle)	1.1-1.3 × 1.9-2.0	1.17 × 1.98
Footspan (less claws)	26.0-29.0	26.8
Footspan (with claws)	41.0-52.0	43.5
Hind claw	11.0-21.0	14.0
Middle claw	5.5-7.0	5.9
Inner claw	3.0-5.0	4.2
Outer claw	3.2-5.5	4.1
Weight (g)	19.5-26.0	22.6

difference between the wing-tip and the tip of the fifth primary. This can be summarised as follows:

Oriental Skylark: $p5 < \text{tip of wing} = 5 \text{ mm or less}$ (range 0-5.0 mm, mean 1.28 mm)

Skylark: $p5 < \text{tip of wing} = 5 \text{ mm or more}$ (range 5.0-9.5 mm, mean 7 mm)

In addition, there is a marked difference in wing-tip to inner secondaries, wing-tip to tertials, and in the first primary to primary coverts. On Oriental, these are as follows:

inner secondaries $< \text{tip of wing} = 13.0-17.0 \text{ mm}$ (mean 14.3 mm)

tertials $< \text{tip of wing} = 1.0-8.0 \text{ mm}$ (mean 3.2 mm)

first primary $< \text{longest primary covert} = 9.5-12.0 \text{ mm}$ (mean 10.7 mm)

On Skylark, these are significantly greater:

- inner secondaries < tip of wing = average 25.0 mm
- tertials < tip of wing = average 16.0 mm
- first primary < longest primary covert = 13.0-18.0 mm.

No difference was found between the two species in the length of primary emarginations or notches.

Sexing

Very little appears to be known about the sexing of Oriental Skylark. Ali & Ripley (1972) and Dementiev & Gladkov (1970) have shown that males and females differ in length of wing and tail, with some overlap in wing measurement, and also differ slightly in lengths of bill and tarsus, but with considerable overlap between the sexes.

Age and moult

I cannot find any detailed information on ageing and moult of Oriental Skylark. I assume that both are similar to those of Skylark, as detailed by Svensson (1984), Ginn & Melville (1983), and Dementiev & Gladkov (1970). These authors note that both adult and juvenile Skylarks have a complete moult during July to mid October, after which they are impossible to age. On individuals which have not finished the complete moult, the unmoulted, old outer primaries of adult Skylarks are heavily worn, while those of juveniles are slightly worn and have clear buffish-white edges (Svensson 1984). Zarudnyi (1916) pointed out that adult Oriental Skylark moults in July-August, while the juvenile begins its moult as soon as it becomes independent of its parents.



100. Oriental Skylark *Alauda gulgula*, Israel, March 1985 (Hadoram Shirihai)



101. Skylark *Alauda arvensis*, Israel, January 1985 (D. Pierce, K. Foundation)

All Oriental Skylarks that I caught in Israel in autumn 1984 had fresh remiges with hardly any wear. The edges of their primaries were pale. Assuming that the species' moult and ageing are the same as those of Skylark, these details indicate that they had all completed their moult, and were thus not ageable. It is interesting to note that the plumage of all



102. Oriental Skylark *Alauda gulgula*, Israel, November 1984 (*Hadoram Shirihai*)

103. Oriental Skylark *Alauda gulgula*, Israel, October 1984 (*M. Meyer*)





104. Oriental Skylark *Alauda gulgula*, Israel, November 1984 (*Hadoram Shirihai*)

105. Skylark *Alauda arvensis*, Israel, January 1985 (*D. Pierce, K. Foundation*)



106. Oriental Skylark *Alauda gulgula*, Israel, October 1984 (*O. ben Shafrut*)

Oriental Skylarks that I have seen in Israel between January and April appeared worn and faded, although wear was less apparent on the remiges; they also had longer and more protruding crests than did those seen in October-November.



107. Oriental Skylark *Alauda gulgula*, Israel, March 1985 (*Hadoram Shirihai*)

The Oriental Skylark in Israel

Meinertzhagen (1930) recorded an Oriental Skylark of the race *A. g. inconspicua* collected in Egypt in 1914, but recent examination of the skin showed it to be a Skylark (Stanley Cramp *in litt.*). The first records for the West Palearctic came, therefore, when I discovered two individuals in fields near Eilat, Israel, on 28th September 1984. At least one of these was present up to the end of October, when further examples were found. Thereafter, others came to light. During 28th September 1984 to 5th April 1985, a total of 16 Oriental Skylarks was seen, ten of which I trapped and ringed; nine were noted during September-November and a further seven in the period December-January. Up to eight wintered in the area.

The first group (migrants?) fed in a patch of desert and damp ploughed fields, as well as in green fields that were well irrigated. They appeared to prefer the drier areas, with low, sparse growth. The wintering group preferred a field of melons, where they both fed and roosted.

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Summary

The Oriental Skylark *Alauda gulgula* is not difficult to separate from Skylark *A. arvensis*. In the field, it looks smaller and squatter, with noticeably shorter tail, wings and primary projection, an obvious rusty tone on ear-coverts and wings, and sandy outer tail feathers. Its bill is comparatively long and thicker than Skylark's and Woodlark's *Lullula arborea*. In flight, it has a sandy, not white, trailing edge to the wings, which seem short and rounded, and its tail looks rather short. Woodlark has a different head pattern and a shorter tail. Oriental differs from Short-toed *Calandrella brachydactyla* and Lesser Short-toed Larks *C. rufescens* in its longer and narrower bill and its more prominent breast streaking. Its buzzing call is different from that of any other lark. It is often more approachable in the field than, for example, Skylark. The main distinguishing features in the hand are the length of tail and of wings, and the wing formula, Oriental being markedly smaller than the nominate race of Skylark; a major distinction is the shortfall between fifth primary and wing-tip (5 mm or less on Oriental, 5 mm or more on Skylark). Notes are provided on sexing, moult and ageing of Oriental Skylark and on its occurrence in Israel.

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POSTSCRIPT In autumn and early winter 1985, up to ten Oriental Skylarks reappeared at Eilat from 1st October; one was already ringed and is assumed to have been one of those from autumn-winter 1984/85.